TOWER SEMICONDUCTOR LTD
Form 20-F
April 30, 2012

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 20-F

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2011 Commission File number: 0-24790

TOWER SEMICONDUCTOR LTD.
(Exact name of registrant as specified in its charter and translation of registrant's name into English)

Israel
(Jurisdiction of incorporation or organization)
Ramat Gavriel Industrial Park
P.O. Box 619, Migdal Haemek 23105, Israel

(Address of principal executive offices)

Nati Somekh, +972-4-6506109, natiso@towersemi.com;
Ramat Gavriel Industrial Park P.O. Box 619, Migdal Haemek 23105, Israel

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Ordinary Shares, par value New Israeli Shekels 1.00 per share	NASDAQ Capital Market

Securities registered or to be registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: 318,290,408 Ordinary Shares.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes o No x

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes o No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (section 229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes ¨ No ¨

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ¨ Accelerated filer ¨ Non-accelerated filer x

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

US GAAP x	International Financial Reporting Standards as issued by the International Accounting Standards Board ¨	Other ¨

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 o Item 18 o

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes o No x

(ii)

FORWARD LOOKING STATEMENTS

This annual report on Form 20-F includes certain “forward-looking” statements within the meaning of Section 21E of the Securities Exchange Act of 1934. The use of the words “projects,” “expects,” “may,” “plans” or “intends,” or words similar import, identifies a statement as “forward-looking”. There can be no assurance, however, that actual results will not differ materially from our expectations or projections. Factors that could cause actual results to differ from our expectations or projections include the risks and uncertainties relating to our business described in this annual report at “Item 3. Key Information--Risk Factors”.

EXPLANATORY INFORMATION

All references herein to “dollars” or “$” are to United States dollars, and all references to “Shekels” or “NIS” are to New Israeli Shekels.

On September 19, 2008, we completed the merger with Jazz Technologies, Inc. (“Jazz Technologies”) and its wholly-owned subsidiary Jazz Semiconductor, Inc. (“Jazz Semiconductor”), an independent semiconductor foundry focused on specialty process technologies for the manufacture of analog intensive mixed-signal semiconductor devices. As a result of this transaction, Jazz Technologies became a wholly-owned subsidiary of Tower Semiconductor Ltd. (“Tower”). Jazz Technologies, Jazz Semiconductor and its wholly-owned subsidiaries are collectively referred to as “Jazz” in this report.

In June 2011, we acquired a fabrication facility in Nishiwaki City, Hyogo, Japan from Micron Technology Inc. which we hold through our wholly-owned Japanese subsidiary, TowerJazz Japan Ltd. (“TJP”).

Our consolidated statements included in this annual report include the results and balances of these companies from the applicable merger and acquisition dates.

As used in this annual report “Fab 1” means the semiconductor fabrication facility located in Migdal Haemek, Israel that Tower acquired from National in 1993. “Fab 2” means the semiconductor fabrication facility located in Migdal Haemek, Israel that Tower established in 2003. “Fab 3” means the semiconductor fabrication facility Jazz operates in Newport Beach, California. “Fab 4” means the semiconductor fabrication facility TJP operates in Nishiwaki City, Hyogo, Japan.

As used in this annual report as of any particular date, “we,” “us,” “our,” and “the Company” and words of similar import refer collectively to Tower and its then owned and consolidated subsidiaries.

Manufacturing or production capacity refers to installed equipment capacity in our facilities and is a function of the process technology and product mix being manufactured because certain processes require more processing steps than others. All information herein with respect to the wafer capacity of our manufacturing facilities is based upon our estimate of the effectiveness of the manufacturing equipment and processes in use or expected to be in use during a period and the actual or expected process technology and product mix for such period. Unless otherwise specifically stated, all references herein to “wafers” with respect to Fab 1 capacity are to 150-mm wafers and with respect to Fab 2, Fab3 and Fab 4 capacity are to 200-mm wafers.

JAZZ SEMICONDUCTOR® is a registered trademark of Jazz in the U.S.

(iii)

TABLE OF CONTENTS

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

Selected Consolidated Financial Data

Our historical consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States ("US GAAP") and are presented in U.S. dollars. The selected historical consolidated financial information as of December 31, 2011 and 2010 and for each of the three years ended December 31, 2011, 2010 and 2009 has been derived from, and should be read in conjunction with, our consolidated financial statements, and notes thereto appearing elsewhere in this annual report. The selected financial data as of December 31, 2009, 2008 and 2007 and for each of the years ended December 31, 2008 and 2007 has been derived from our audited financial statements for those years not included in our annual report.

Following the merger with Jazz and the acquisition of TJP, our consolidated financial statements include Jazz's results commencing September 19, 2008 and TJP's results commencing June 2011, and our consolidated balance sheets include Jazz's and TJP's balances, respectively, as of December 31, 2011.

Due to the merger with Jazz and the acquisition of TJP, it may be difficult to compare the results of operations for periods subsequent to each these transactions with prior periods. The selected historical consolidated financial data set forth below should be read in conjunction with our consolidated financial statements and related notes appearing in this annual report and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this report. Our historical financial information may not be indicative of future performance.

	Year Ended December 31,				
	2011	2010	2009	2008	2007
	(in thousands, except per share data)				
Statement of Operations Data:					
Revenues	$611,023	$509,262	$298,812	$251,659	$230,853
Cost of revenues	526,198	402,077	325,310	296,513	284,771
Gross profit (loss)	84,825	107,185	(26,498)	(44,854)	(53,918)
Research and development	24,886	23,876	23,375	14,969	13,790
Marketing, general and administrative	48,239	39,986	31,943	33,223	31,604
Write-off of in-process research and development	--	--	--	1,800	--
Merger/acquisition related costs	1,493	--	--	520	--
Fixed assets impairment	--	--	--	120,538	--
Operating profit (loss)	10,207	43,323	(81,816)	(215,904)	(99,312)
Financing expense, net	(40,302)	(72,925)	(45,710)	(17,566)	(34,976)
Gain on debt restructuring	--	--	--	130,698	--
Gain from acquisition	19,467	--	--	--	--

Other income (expense), net	13,460	65	2,045	(918)	92
Income (loss)before income tax expenses	2,832	(29,537)	(125,481)	(103,690)	(134,196)
Income tax benefit (expense)	(21,362)	(12,830)	5,022	(1,455)	--
Loss for the year	$(18,530)	$(42,367)	$(120,459)	$(105,145)	$(134,196)
Basic loss per ordinary share	$(0.06)	$(0.18)	$(0.71)	$(0.78)	$(1.13)
Other Financial Data:					
Depreciation and amortization	$162,679	$143,023	$143,404	$138,808	$154,343

	As of December 31,				
	2011	2010	2009	2008	2007
			(in thousands)		
Selected Balance Sheet Data:					
Cash and cash equivalents, short-term interest-bearing deposits and designated deposits	$101,149	$198,382	$81,795	$34,905	$44,536
Working capital	35,830	72,053	70,113	24,133	46,711
Total assets	857,221	801,728	650,837	706,793	686,782
Short-term bank debt and current maturities of debentures	48,255	122,179	7,000	15,330	7,887
Long-term debt from banks	103,845	111,882	187,606	222,989	379,314
Debentures	197,765	247,598	241,207	208,512	117,460
Shareholders’ equity	174,703	117,782	56,014	111,567	44,709
Weighted average number of ordinary shares outstanding	302,065	235,320	170,460	134,749	118,857
Number of shares outstanding	318,290	265,536	198,961	160,026	124,226

Risk Factors

Our business faces many risks. Any of the risks discussed below could have a material impact on our business, financial condition and operating results.

Risks Affecting Our Business

We have a material amount of debt and other liabilities, and there is no assurance that we will be able to fully repay it in a timely manner.

We have a material amount of debt and other liabilities. As of December 31, 2011, Tower had (i) approximately $131 million of outstanding bank loans carrying interest of Libor+2.75% to be repaid in 8 quarterly installments between the third quarter of 2013 and mid-2015, and (ii) approximately $177 million of debentures, to be repaid between December 2012 and December 2016, of which approximately $44 million is presented as short term as of December 31, 2011. In addition, as of December 31, 2011, Jazz had (i) approximately $15 million of outstanding borrowings under its up to $45 million Wells Fargo credit line carrying an interest rate of Libor plus approximately 2.5%,due September 2014, of which approximately $5 million was reflected as short term debt, and (ii) approximately $94 million of debentures due 2015. In addition to the financial debt detailed above, our liabilities are detailed in our balance sheets as of December 31, 2011 which was furnished on Form 6-K on February 24, 2012. Tower has not guaranteed any of Jazz's debt and Jazz has not guaranteed any of Tower's debt. Further, the bank facilities of both Tower and Jazz and certain provisions in the agreement signed for the acquisition of TJP contain certain limitations regarding intercompany transactions and covenants regarding the incurrence of additional indebtedness, hence, each respective company may be unable to serve its own debt and liabilities and may be unable to obtain funding from affiliated parties to serve said debt and liabilities due to the abovementioned limitations.

If we do not satisfy our debt and liabilities, we may face significant negative consequences, including:

- requiring the use of a substantial portion of our cash flow from operating activities to service our indebtedness rather than investing our cash flows to fund our growth plans, working capital and capital expenditures;
- increasing our vulnerability to adverse economic and industry conditions;
- limiting our ability to obtain additional financing;
- limiting our flexibility in planning for, or reacting to, changes in our business and the industry in which we compete;
- placing us at a competitive disadvantage with respect to less leveraged competitors and competitors that have better access to capital resources;
- Volatility in our non-cash financing expenses due to increases in the fair value of our debt obligations, which may increase our net loss or reduce our net profits; and/or
- enforcement by the banks of their liens against Tower and Jazz’s respective assets, as applicable (in the occurrence of event of default).

Following recent difficult times in worldwide financial and other markets, there is no assurance that the global economic conditions will not negatively affect our business and financial position. There is no assurance that another downturn in the semiconductor industry and/or in the global economy will not occur. The effects of another downturn in the semiconductor industry and/or in the global economy may include global decreased demand, downward price pressure, excess inventory and unutilized capacity worldwide, which may negatively impact consumer and customer demand for our products and the end products of our customers, as well as commercial relationships with our customers, suppliers, and creditors, including our lenders and our ability to raise funds in the capital markets. A downturn in the semiconductor industry and/or in the global economy may adversely affect our plans to continue capacity growth, and our future financial results and position, including our ability to raise funds in the capital markets and to fulfill our debt obligations and other liabilities, comprised mainly of banks' loans and debentures.

In order to finance our debt and other liabilities and obligations, in addition to cash on hand and expected cash flow generated by our operating activities, we continue to explore measures to obtain funds from additional sources including debt re-financing, sales of new securities, opportunities for the sale and lease-back of a portion of our real estate assets, sale of other assets, intellectual property licensing, as well as debt and/or equity restructuring and additional financing alternatives. However, there is no assurance that we will be able to obtain sufficient funding, if at all, from the financing sources detailed above or other sources in a timely manner or on commercially reasonable terms in order to allow us to fully or partially repay our short term and long term debt and other liabilities and obligations in a timely manner and fund our growth plans, working capital needs and capital expenditures.

If we are unable to manage fluctuations in cash flow, our business and financial condition may be adversely affected.

Our working capital requirements and cash flows are subject to quarterly and yearly fluctuations, depending on a number of factors. If we are unable to manage fluctuations in cash flow, our business, operating results and financial condition may be materially adversely affected. Factors which could lead us to suffer cash flow fluctuations include:

- fluctuations in the level of revenues from our operating activities;
- fluctuations in the collection of receivables;
- timing and size of payables;
- the timing and size of capital expenditures;
- the repayment schedules of our debt obligations; and
- our ability to fulfill our obligations and meet performance milestones under our facility agreement, foundry agreements and investments center programs.

If Tower fails to comply with the repayment schedule or any other terms of its amended facility agreement and is unsuccessful in negotiating a revised repayment schedule or revised terms, or if Tower fails to meet any of the covenants and financial ratios stipulated in its amended facility agreement and Tower's banks do not waive its noncompliance, Tower's business may be adversely affected.

Under Tower's amended facility agreement with Bank Hapoalim B.M. and Bank Leumi Le-Israel B.M., in the event that Tower fails to comply with the repayment schedule or any other terms of its amended facility agreement and is unsuccessful in negotiating a revised repayment schedule or revised terms, or fails to meet any of the covenants and financial ratios stipulated in the amended facility agreement, and Tower's banks do not waive its noncompliance, Tower's banks may require Tower to immediately repay all outstanding loans in the amount of $131 million as of March 31, 2012, plus penalties, and the banks would be entitled to exercise the remedies available to them under the amended facility agreement, including enforcement of their lien against Tower's assets. There is no assurance that Tower will be able to generate the cash necessary to fund the scheduled payments from increased levels of cash from operations or from additional equity or debt financing or other funding sources. If Tower is not able to generate increased levels of revenue and cash from operations or raise sufficient funds in a timely manner, Tower may be unable to comply with the repayment schedule and may fail to meet covenants and financial ratios under the amended facility agreement, which may have a material adverse effect on Tower.

Israeli banking laws may impose restrictions on the total debt that Tower may borrow from its banks.

Pursuant to a directive published by the Israel Supervisor of Banks, effective March 31, 2004, Tower may be deemed part of a group of borrowers comprised of the Ofer Brothers Group, the Israel Corporation Ltd. ("Israel Corp.") and other companies which are also included in such group of borrowers pursuant to the directive, including companies under the control or deemed control of these entities. The directive imposes limitations on amounts that banks may lend to borrowers or groups of borrowers. Should Tower's banks exceed these limitations, their ability to lend additional money to Tower in the future would be limited and they may require Tower to return some or all of its outstanding borrowings (which, under Tower's amended facility agreement with its banks, were approximately $131 million in the aggregate as of March 31, 2012), which may have a material adverse effect on Tower's business, financial condition and results of operations.

Our success as a specialty foundry depends on our ability to continue to expand our business, customer base and market presence, including through acquisitions. There is no assurance that we will be successful in finding or successfully executing such acquisitions.

Our financial results depend, to a significant degree, upon our ability to increase our presence in the specialty foundry field and firmly entrench ourselves as a leading specialty foundry. In order to do so and thereby improve our financial position and operating cash flow, we need to expand our business and attract new customers who will utilize our expanded capacity.

Our success at such expansion is dependent, in part, on finding suitable targets for acquisitions, successfully consummating such acquisitions and integrating them into our business.

We cannot assure you that we will be successful in finding or successfully executing such acquisitions or that they will achieve the expected results. Furthermore, terms of our existing indebtedness, may prohibit or limit our ability to engage in acquisitions.

Our reliance on acquisitions, such as our recent acquisition of TJP in June 2011, as a means of growth involves risks that could adversely affect our future revenues and operating results. For example:

- We may fail to identify acquisitions that would enable us to execute our business strategy.
- We compete with specialty foundries who may bid against us to acquire potential targets. This competition may result in decreased availability of, or increased prices for, suitable acquisition candidates.
- We may not be able to obtain the necessary regulatory approvals, or we may not be able to obtain the necessary approvals from our lender banks, and as a result, or for other reasons, we may fail to consummate certain acquisitions.
- Potential acquisitions may divert management’s attention away from our existing business operations, which may have a negative adverse effect on our business.
- We may fail to integrate acquisitions successfully in accordance with our business strategy or achieve expected synergies.

- We may not be able to retain experienced management and skilled employees from the businesses we acquire and, if we cannot retain such personnel, we may not be able to attract new skilled employees and experienced management to replace them.

- We may purchase a company with excessive unknown contingent liabilities, including, among others, patent infringement or product liability.

- We may not be able to obtain additional financing on favorable terms, if at all, which could limit our ability to engage in acquisitions.

If we do not succeed in attracting new customers and products to Fab 4 thereby achieving the anticipated benefits of the Fab 4 acquisition, it may negatively affect our business and growth plans and may adversely affect the operations of Fab 4.

Our recent acquisition of TJP involves known and unknown risks that could adversely affect our future revenues and operating results. For example:

- The acquisition may expose us to unanticipated liabilities.

- We may fail to successfully integrate TJP in accordance with our business strategy.

- We may be unsuccessful in attracting new customers to Fab 4 in a timely manner and will therefore have to revise our cost structure to reduce the costs of operations which may result in incurring high one-time costs.

- In the event it takes longer than expected to attain new customers that will manufacture at Fab 4, it may adversely affect TJP's ability to gain satisfactory sources of cash from operations to fund our costs at Fab 4, thereby adversely affecting TJP's ability to maintain its operations. To date, Fab 4 has served entirely as a fabrication facility for Micron's products. We are in the process of bringing in various process technologies to Fab 4 to allow for the manufacture of a wide range of products at this facility for a broad range of customers. This requires significant capital expenditures and on site qualification of technologies. In order for TJPto have sufficient funds for said activity, TJP needs to expand its customer base beyond its current sole customer, Micron, and maintain a sufficient level of demand from Micron for its products that enables TJP to cover its expenses until the qualification and mass production of new customers' products. There is no assurance that TJP will be successful in expanding its customer base in a timely manner in order to obtain sufficient funds to bring in new technologies for new customers. Such funds may also come from outside sources, including local Japanese government grants, however, such funding sources are limited by TJP's agreements with Micron. In the event that TJP is unable to obtain such funds from its business and operations, the Company's financial results may be adversely affected.

If TJP is unable to comply with certain covenants, it will be subjected to significant penalties, which may adversely affect its operations.

Pursuant to its agreements with Micron, TJP is subject to certain affirmative, financial and restrictive covenants, and other protections until June 2013.

If TJP is unable to comply with such covenants or limitations, Micron will have various potential remedies depending on the level of breach, including:

- The ability to buy back the TJP shares and/or TJP assets (purchase will be at the fair market value of TJP's assets and liabilities at time of buy back);

- Ability to foreclose on the pledged assets (which comprise real estate and assets of TJP);
- Ability to claim liquidated damages in an amount of up to $100 million.

In the event that TJP breaches covenants that entitle Micron to remedies such as those listed above, our financial results may be adversely affected and it may adversely affect Fab 4 operations.

If we do not fully equip Fab 2 located in Israel and complete the equipment installation, and ramp-up of production in Fab 2 to its full capacity, we will not fully utilize the substantial investment made in the construction of Fab 2.

Depending on the process technology and product mix, when fully ramped-up, it is estimated that Fab 2 will be able to achieve capacity levels of approximately 45,000 wafers per month. The full ramp-up of Fab 2 has not been completed to date. The timing of the implementation of the ramp-up of Fab 2 is dependent on prevailing and forecasted market conditions, customer demand and our ability to fund such ramp-up. There can be no assurance as to the timing or our ability to achieve Fab 2 capacity levels of approximately 45,000 wafers per month. The ramp-up of Fab 2 is a substantial and complex project. If we cannot fund the further ramp-up of Fab 2 or otherwise successfully complete the ramp-up of Fab 2, we may be unable to meet our customers' production demands and as a result may lose customers and may not attract new ones. In order to fully ramp-up Fab 2, we will need to continue to develop new process technologies in order to suit our customers' needs. In addition, we have experienced, and may in the future experience, difficulties that are customary in the installation, functionality and operation of equipment during manufacturing. Failures or delays in obtaining and installing the necessary equipment, technology and other resources may delay the completion of the ramp-up of Fab 2, add to its cost and result in the Company not fully utilizing the substantial investment made in the construction of Fab 2, which, given the high operating costs of Fab 2, may negatively affect our future financial results.

Failure to comply with the terms of the Israeli Investment Center regulations may result in us not receiving the benefit of the approved plans or being required to make significant payments to the Investment Center.

In February 2011, we received an official approval certificate ("ktav ishur") from the Israeli Investment Center, a governmental agency, for our expansion program according to which we received approximately $33 million as of December 31, 2011. Under our previous approved program approved in December 2000, we received an additional $165 million of grants for capital expenditure investment made during the years 2001 through 2005.

Eligibility for the above grants and other tax benefits is subject to various conditions stipulated by the Israeli Law for the Encouragement of Capital Investments - 1959 ("Investments Law") and the regulations promulgated there under, as well as the criteria set forth in the certificates of approval. In the event we breach the terms of the regulations or the law, we may not be eligible to receive the benefits of the approved plan and may be required to make significant payments to the Investment Center, up to the amounts we received in the past. In order to secure fulfillment of the conditions related to the receipt of investment grants, floating liens were registered in favor of the State of Israel on substantially all of Tower's assets. These liens secure the Investment Center against a breach by us of the terms of the grant program.

Failure to receive the grants will require us to seek alternative sources of funding for our ramp-up which may not be available to us.

If we do not receive orders from our customers with whom we have signed long-term contracts, we may have excess capacity.

We have committed a portion of our capacity for future orders to some customers with whom we have signed long-term contracts. If these customers do not place orders with us in accordance with their contractual loading and purchase commitments, and if we are unable to fill such unutilized capacity, our financial results may be adversely affected.

We may be required to incur additional indebtedness.

Although Tower and Jazz are limited by the covenants in their respective loan facilities, and TJP is limited by covenants in its agreements with Micron, Tower, Jazz and/or TJP could find themselves in a position in which they would be required to take on additional indebtedness in order to fund their operations, which would increase the amount of our outstanding indebtedness. Any additional indebtedness may increase the risks associated with servicing our indebtedness.

A global recession and credit crisis may adversely affect our results.

Market analysts are currently cautious in regard to the global economic conditions forecasted for 2012 and beyond and there is no assurance that another downturn in the semiconductor industry and/or in the global economy will not occur. The effects of another downturn in the semiconductor industry and/or in the global economy may adversely affect our future financial results and position, including our ability to fulfill our debt obligations and other liabilities, by negatively impacting consumer and customer demand for our products and the end products of our customers. A disruption in the ability of our customers to access sources of liquidity could lead to the inability or failure on their part to meet their payment obligations to us. Any such downturn may also have a detrimental effect on our commercial relationships with our customers, suppliers, and creditors, including our lenders. The insolvency of key suppliers could lead to product delays.

Our operating results fluctuate from quarter to quarter which makes it difficult to predict our future performance.

Our revenues, expenses and operating results have varied significantly in the past and may fluctuate significantly from quarter to quarter in the future due to a number of factors, many of which are beyond our control. These factors include, among others:

- The cyclical nature of both the semiconductor industry and the markets served by our customers;
- Changes in the economic conditions of geographical regions where our customers and their markets are located;
- Shifts by integrated device manufacturers (IDMs) and customers between internal and outsourced production;
- Inventory and supply chain management of our customers;
- The loss of a key customer, postponement of an order from a key customer or the rescheduling or cancellation of large orders;
- The occurrence of accounts receivable write-offs, failure of a key customer to pay accounts receivable in a timely manner or the financial condition of our customers in general;
- The rescheduling or cancellation of planned capital expenditures;

8

- Our ability to satisfy our customers' demand for quality and timely production;
- The timing and volume of orders relative to our available production capacity;
- Our ability to obtain raw materials and equipment on a timely and cost-effective basis;
- Price erosion in the industry;
- Environmental events or industrial accidents such as fire or explosions;
- Our susceptibility to intellectual property rights disputes;
- Our ability to maintain existing partners and to enter into new partnerships and technology and supply alliances on mutually beneficial terms;
- Interest, price index and currency rate fluctuations that were not hedged;
- Technological changes and short product life cycles;
- Timing for the design and the qualification of new products;
- Increase in the fair value of our bank loans, certain of our warrants and debentures; and
- Changes in accounting rules affecting our results.

Due to the factors noted above and other risks discussed in this section, many of which are beyond our control, investors should not rely on quarter-to-quarter comparisons to predict our future performance. Unfavorable changes in any of the above factors may seriously harm our company, including our operating results, financial condition and ability to maintain our operations.

Fluctuations in the market price of our traded securities may significantly affect our reported GAAP non-cash financing expenses.

Under prevailing accounting standards, we are required, in certain circumstances, to mark our liabilities, or an embedded feature that is part of a liability, to market, e.g. convertible debentures, warrants and options. An increase or a fluctuation in such securities' market price or in our share price may cause a significant increase or fluctuation in our reported GAAP non-cash financing expenses, net, which may harm our ability to accurately forecast our reported GAAP non-cash financing expenses, net, our reported net profit or loss, and our reported earnings or losses per share, and may cause our possible operating profits to result in a net loss, increase our net loss or reduce our net profits. This non-cash appreciation in our obligations and financing expenses will either eventually be reversed or be converted into equity, or a combination thereof.

The lack of a significant backlog resulting from our customers not placing purchase orders far in advance makes it difficult for us to forecast our revenues in future periods, adjust our production costs and efficiently allocate capital on a timely basis and may therefore have an adverse affect on our business and results of operations.

Our customers generally do not place purchase orders far in advance, partly due to the cyclical nature of the semiconductor industry. As a result, we do not typically operate with any significant backlog. The lack of a significant backlog makes it difficult for us to forecast our revenues in future periods. Moreover, since our expense levels are based in part on our expectations of future revenues, we may be unable to adjust costs in a timely manner to compensate for revenue shortfalls. We expect that, in the future, our revenues in any quarter will continue to be substantially dependent upon purchase orders received in that quarter and in the immediately preceding quarter. There is no assurance that any of our customers will continue to place orders with us in the future at the same levels as in prior periods. As a result, it may be difficult to plan our capacity, which requires significant lead time to ramp. If orders received from our customers significantly differ from our expectations with respect to the product, volume, price or other items, our operating results, financial condition and ability to maintain our operations may be adversely affected.

We occasionally manufacture wafers based on forecasted demand, rather than actual orders from customers. If our forecasted demand exceeds actual demand, we may have obsolete inventory, which could have a negative impact on our results of operations.

We generally do not manufacture wafers unless we receive a customer purchase order. On occasion, we may produce wafers in excess of customer orders based on forecasted customer demand, because we may forecast future excess demand or because of future capacity constraints. If we manufacture more wafers than are actually ordered by customers, we may be left with excess inventory that may ultimately become obsolete and must be scrapped if it cannot be sold. Significant amounts of obsolete inventory may have a negative impact on our results of operations.

We have a history of operating losses. Our facilities must operate at high utilization rates in order to reduce our losses.

We have operated at a loss for the last number of years and may continue to do so in the future. Because fixed costs represent a substantial portion of the operating costs of semiconductor manufacturing operations, we must operate our facilities at high utilization rates in order to reduce our loss. A significant portion of our losses have been due primarily to significant depreciation and amortization expenses related mainly to Fab 2, as well as financing expenses and high level of fixed costs of our other operating expenses. These costs and expenses have not been offset by a sufficient increase in the level of revenues. If we will not operate our facilities consistently at high utilization rates, we may be unable to maintain operating profits, which may adversely affect our business. We cannot assure you that we will be profitable on a quarterly or annual basis in the future.

Our sales cycles are typically long, and orders received may not meet our expectations, which may adversely affect our operating results.

Our sales cycles, which we measure from first contact with a customer to first shipment of a product ordered by the customer, vary substantially and may last as long as two years or more, particularly for new technologies. In addition, even after we make initial shipments of prototype products, it may take several more months to reach full production of the product. As a result of these long sales cycles, we may be required to invest substantial time and incur significant expenses in advance of the receipt of any product order and related revenue. If orders ultimately received differ from our expectations with respect to the product, volume, price or other items, our operating results, financial condition and ability to maintain our operations may be adversely affected.

Demand for our foundry services is dependent upon the demand in our customers’ end markets. A decrease in demand for, or selling prices of, products that contain semiconductors may decrease the demand for our services and reduce our margins.

Our customers generally use the semiconductors produced in our fabs in a wide variety of applications. We derive a significant percentage of our operating revenues from customers who use our manufacturing services to make semiconductors for communication devices, consumer electronics, PCs and other computers. Any significant decrease in the demand for communication devices, consumer electronics, PCs or other computers may decrease the demand for our services. In addition, if the average selling prices of communication devices, consumer electronics, PCs or other computers decline significantly, we will be pressured to further reduce our selling prices, which may reduce our revenues and, therefore, may reduce our margins significantly. As demonstrated by downturns in demand for high technology products in the past, market conditions can change rapidly, without apparent warning or advance notice. In such instances, our customers will experience inventory buildup and/or difficulties in selling their products and, in turn, will reduce or cancel orders for wafers from us. The timing, severity and recovery of these downturns cannot be predicted accurately or at all. When they occur, our business and profitability may suffer.

10

In order for demand for our wafer fabrication services to increase, the markets for the end products utilizing these services must develop and expand. For example, the success of our imaging process technologies will depend, in part, on the growth of markets for certain image sensor product applications. Because our services may be used in many new applications, it is difficult to forecast demand. If demand is lower than expected, we may have excess capacity, which may adversely affect our financial results. If demand is higher than expected, we may be unable to fill all of the orders we receive, which may result in the loss of customers and revenue.

The cyclical nature of the semiconductor industry and any resulting periodic overcapacity may lead to erosion of sale prices and make our business and operating results particularly vulnerable to economic downturns, and overcapacity in the semiconductor industry may reduce our revenues, earnings and margins.

The semiconductor industry has historically been highly cyclical and subject to significant and often rapid increases and decreases in product demand. Traditionally, companies in the semiconductor industry have expanded aggressively during periods of increased demand in order to have the capacity needed to meet expected demand in the future. If actual demand does not increase or declines, or if companies in the industry expand too aggressively in light of the actual increase in demand, the industry will generally experience a period in which industry-wide capacity exceeds demand, as was the case in the first quarter of 2009. This could result in overcapacity and excess inventories, leading to rapid erosion of average sale prices. The prices that we can charge our customers for our services are significantly related to the overall worldwide supply of integrated circuits and semiconductor products. The overall supply of semiconductor products is based in part on the capacity of other companies, which is outside of our control. In periods of overcapacity, if we are unable to offset the adverse effects of overcapacity through, among other things, our technology and specialty products, we may have to lower the prices we charge our customers for our services and/or we may have to operate at significantly less than full capacity. Such actions could reduce our margin and weaken our financial condition and results of operations. We cannot give an assurance that an increase in the demand for foundry services in the future will not lead to overcapacity in the near future, which could materially adversely affect our revenues, earnings and margins. We expect these patterns to repeat in the future. The overcapacity and downward price pressure characteristic of a prolonged downturn in the semiconductor market, such as we experienced several times in the past, may not allow us to operate at a profit, and may seriously harm our financial results and business if we cannot take appropriate or effective actions in a timely manner, such as reducing our costs to sufficiently offset declines in demand for our services.

If we do not maintain our current customers and attract additional customers, our business may be adversely affected.

Loss or cancellation of business from, or decreases in the sales volume or sales prices to, our significant customers, or our failure to replace former customers with other customers, may seriously harm our financial results, revenue and business. Since the sales cycle for our services typically exceeds one year, if our customers order significantly fewer wafers than forecasted, we will have excess capacity that we may not be able to fill within a short period of time, resulting in lower utilization of our facilities. We may have to reduce prices to try to sell more wafers in order to utilize the excess capacity. In addition to the revenue loss that may result from unused capacity or lower sales prices, we may have difficulty adjusting our costs to reflect the lower revenue in a timely manner, which could harm our financial results.

We are substantially dependent upon our relationships with certain customers, and the termination or non-renewal of our agreements or other arrangements with these customers may materially and negatively impact our financial position and financial results.

We have relationships with several customers that represent a material portion of our revenues. During the year ended December 31, 2011, we had four customers who contributed between 5% to 32% of our revenues. During the year ended December 31, 2010, we had five customers who contributed between 5% to 16% of our revenues. In 2009, we had three customers who contributed between 7% to 17% of our revenues. The loss of any one of these customers, whether due to insolvency, their unwillingness or inability to perform their obligations under their respective relationships with us, or if we are not able to renew on commercially reasonable terms any of their respective arrangements with us, may materially and negatively impact our overall business and our consolidated financial position and financial results.

In particular, Micron, currently our largest customer, is currently the sole customer of TJP and its minimum purchase obligations steadily decrease according to the supply agreement until they expire in mid-2014. There is no assurance that Micron will enter into a new contract committing it to future purchases beyond mid 2014 and there is no assurance that TJP will be able to attract a sufficient number of new customers to utilize its Fab 4. If TJP is unable to attract new customers to cover its costs, this may materially impact our financial position and may negatively impact our plans for future growth, as well as adversely affect Fab 4's operations.

If we do not maintain and develop our technology processes and services, we may lose customers and may be unable to attract new ones.

The semiconductor market is characterized by rapid change, including the following:

- rapid technological developments;
- evolving industry standards;
- changes in customer and product end user requirements;
- frequent new product introductions and enhancements; and
- short product life cycles with declining prices as products mature.

Our ability to maintain our current customer base and attract new customers is dependent in part on our ability to continuously develop and introduce to production advanced specialized manufacturing process technologies and to purchase the appropriate equipment. If we are unable to successfully develop and introduce these processes to production in a timely manner or at all, if our competitors are able to successfully develop and introduce these processes to production before us, or if we are unable to purchase the appropriate equipment required for such processes, we may be unable to maintain our current customer base and attract new customers.

The semiconductor foundry business is highly competitive; our competitors may have competitive advantages over us and our results of operations may be adversely affected if we cannot successfully compete in the industry.

The semiconductor foundry industry is highly competitive. We compete with more than ten independent dedicated foundries, the majority of which are located in Asia-Pacific, including foundries based in Taiwan, China, Korea and Malaysia, and with over 20 integrated semiconductor and end-product manufacturers that allocate a portion of their manufacturing capacity to foundry operations. The foundries with which we compete benefit from their close proximity to other companies involved in the design and manufacture of integrated circuits, or ICs.

As our competitors continue to increase their manufacturing capacity, there will be an increase in specialty semiconductor capacity during the next several years. As specialty capacity increases, there may be more competition and pricing pressure on our services, potentially resulting in underutilization of our capacity. Any significant increase in competition or pricing pressure may erode our profit margins, weaken our earnings or increase our losses.

In addition, some semiconductor companies have advanced their CMOS designs to 65 nanometer or smaller geometries. These smaller geometries may provide the customer with performance and integration features that may be comparable to, or exceed, features offered by our specialty process technologies. They may also be more cost-effective at higher production volumes for certain applications, such as when a large amount of digital content is required in a mixed-signal semiconductor and less analog content is required. Our specialty processes will therefore compete with these processes and some of our potential and existing customers could elect to design these advanced CMOS processes into their next generation products. We are not currently capable, and do not currently plan to become capable, of providing CMOS processes at these smaller geometries. If our potential or existing customers choose to design their products using these advanced CMOS processes, our business may be negatively impacted.

In addition, many of our competitors may have one or more of the following competitive advantages over us:

- greater manufacturing capacity;
- multiple and more advanced manufacturing facilities;
- more advanced technological capabilities;
- a more diverse and established customer base;
- greater financial, marketing, distribution and other resources;
- a better cost structure; and/or
- better operational performance in cycle time and yields.

If we do not compete effectively, our business and results of operations may be adversely affected.

Furthermore, IDMs continue to design and manufacture ICs in their own fabrication facilities. There is a possibility that in certain periods or under certain circumstances such as low demand, they will choose to manufacture their products in their facilities instead of manufacturing products at external foundries.   If our customers will choose to manufacture internally rather than manufacture at our facilities, our business may be negatively impacted.

If we experience difficulty in achieving acceptable device yields, product performance and delivery times as a result of manufacturing problems, our business may be seriously harmed.

The process technology for the manufacture of semiconductor wafers is highly complex, requires advanced and costly equipment and is constantly being modified in an effort to improve device yields, product performance and delivery times. Microscopic impurities such as dust and other contaminants, difficulties in the production process, defects in the key materials and tools used to manufacture a wafer and other factors can cause wafers to be rejected or individual semiconductors on specific wafers to be non-functional. We may experience difficulty achieving acceptable device yields, product performance and product delivery times in the future as a result of manufacturing problems. Although we have been enhancing our manufacturing capabilities and efficiency, from time to time we have experienced production difficulties that have caused delivery delays and quality control problems, as is common in the semiconductor industry. In the past we have encountered the following problems:

difficulties in upgrading or expanding existing facilities;
unexpected breakdowns in our manufacturing equipment and/or related facility systems;
changing or upgrading our process technologies;
raw materials shortages and impurities; and
delays in delivery and shortages of spare parts and in maintenance of our equipment.

Should these problems repeat, we may suffer delays in delivery and/or loss of reputation, business and revenues. Any of these problems may seriously harm our operating results, financial condition and ability to maintain our operations.

If we are unable to purchase equipment and raw materials, we may not be able to manufacture our products in a timely fashion, which may result in a loss of existing and potential new customers.

To increase the production capability of our facilities and to maintain the quality of production in our facilities, we must procure additional equipment. In periods of high market demand, the lead times from order to delivery of manufacturing equipment could be as long as 12 to 18 months. In addition, our manufacturing processes use many raw materials, including silicon wafers, chemicals, gases and various metals, and require large amounts of fresh water and electricity. Manufacturing equipment and raw materials generally are available from several suppliers. In several instances, however, we purchase equipment and raw materials from a single source. Shortages in supplies of manufacturing equipment and raw materials could occur due to an interruption of supply or increased industry demand. Any such shortages may result in production delays that may result in a loss of existing and potential new customers which may have a material adverse effect on our business and financial condition.

Our exposure to inflation, currency exchange and interest rate fluctuations may increase our cost of operations and we may not have adequately hedged against them.

Of our revenues for the year ended December 31, 2011, 32% was in Japanese Yen (JPY) and almost all the rest of our revenues were in U.S. dollars (USD). Our financing and investing activities and our expenses and costs are denominated in USD, New Israeli Shekels (NIS), JPY and Euros. We are, therefore, exposed to the risk of currency exchange rate fluctuations.

The USD amount of our operations, which is denominated in NIS and JPY, is influenced by changes in the rate of inflation in Israel and the extent to which such changes are not offset by changes in valuation of the NIS in relation to the USD and by the changes in the exchange rate of the USD in relation to the JPY. Such dollar amount of operations will also increase if the USD devalues against the NIS. Outstanding principal and interest on some of Tower's debentures is linked to the Israeli consumer price index (CPI) and therefore, Tower's dollar costs will increase if inflation in Israel exceeds the devaluation of the NIS against the U.S. dollar.

Tower and Jazz's credit facility agreements provide for interest based on a floating LIBOR rate, thereby exposing us to interest rate fluctuations.

Tower regularly engages in various hedging strategies to reduce its exposure to some, but not all, of these risks and intends to continue to do so in the future. However, despite any such hedging activity, Tower is likely to remain exposed to interest rate and exchange rate fluctuations and inflation, which may increase the cost of its operating and financing activities.

We depend on intellectual property rights of third parties and failure to maintain or acquire licenses may harm our business.

We depend on third party intellectual property in order for us to provide certain foundry and design support services to our customers. If problems or delays arise with respect to the timely development, quality and provision of such intellectual property to us, the design and production of our customers' products could be delayed, resulting in underutilization of our capacity. If any of our third party intellectual property vendors goes out of business, liquidates, merges with, or is acquired by, another company that discontinues the vendor's previous line of business, or if we fail to maintain or acquire licenses to such intellectual property for any other reason, our business may be adversely affected. In addition, license fees and royalties payable under these agreements may impact our margins and operating results.

Failure to comply with the intellectual property rights of third parties or to defend our intellectual property rights may harm our business.

Our ability to compete successfully depends on our ability to operate without infringing on the proprietary rights of others and defending our intellectual property rights. Because of the complexity of the technologies used and the multitude of patents, copyrights and other overlapping intellectual property rights, it is often difficult for semiconductor companies to determine infringement. Therefore, the semiconductor industry is characterized by frequent litigation regarding patent, trade secret and other intellectual property rights. We have been subject to other intellectual property claims from time to time, which have been resolved through license agreements, the terms of which have not had a material effect on our business.

Because of the nature of the industry, we may continue to be party to infringement claims in the future. In the event any third party were to assert infringement claims against us or our customers, we may have to consider alternatives including, but not limited to:

- negotiating cross-license agreements;
- seeking to acquire licenses to the allegedly infringed patents, which may not be available on commercially reasonable terms, if at all;
- discontinuing use of certain process technologies, architectures, or designs, which could cause us to stop manufacturing certain integrated circuits if we were unable to design around the allegedly infringed patents;
- litigating the matter in court and paying substantial monetary damages in the event we lose; or
- seeking to develop non-infringing technologies, which may not be feasible.

Any one or several of these alternatives may place substantial financial and administrative burdens on us and hinder our business. Litigation, which may result in substantial costs to us and diversion of our resources, may also be necessary to enforce our patents or other intellectual property rights or to defend us or our customers against claimed infringement of the rights of others. If we fail to obtain certain licenses or if litigation relating to alleged patent infringement or other intellectual property matters occurs, it may prevent us from manufacturing particular products or using particular technologies, which may reduce our opportunities to generate revenues.

As of March 31, 2012, we held 185 patents in force in the United States and 28 patents in force in foreign countries. We intend to continue to file patent applications when appropriate. The process of seeking patent protection may take a long time and be expensive. We cannot assure you that patents will be issued from pending or future applications or that, if patents are issued, they will not be challenged, invalidated or circumvented or that the rights granted under the patents will provide us with meaningful protection or any commercial advantage. In addition, we cannot assure you that other countries in which we market our services and products will protect our intellectual property rights to the same extent as the United States. Further, we cannot assure you that we will at all times enforce our patents or other intellectual property rights or that courts will uphold our intellectual property rights, or enforce the contractual arrangements that we have entered into to protect our proprietary technology, which could reduce our opportunities to generate revenues.

Effective intellectual property enforcement may be unavailable or limited in some countries. It may be difficult for us to protect our intellectual property from misuse or infringement by other companies in these countries. Our inability to enforce our intellectual property rights in some countries may harm our business and results of operations.

We could be seriously harmed by failure to comply with environmental regulations.

Our business is subject to a variety of laws and governmental regulations in Israel, the U.S. and in Japan, relating to the use, discharge and disposal of toxic or otherwise hazardous materials used in Tower's production processes in Israel, in Jazz's production processes in California and in TJP's facility in Japan. If we fail to use, discharge or dispose of hazardous materials appropriately, or if applicable environmental laws or regulations change in the future, we may be subject to substantial liability or could be required to suspend or adversely modify our manufacturing operations.

We are subject to the risk of loss due to fire because the materials we use in our manufacturing processes are highly flammable.

We use highly flammable materials, such as silane and hydrogen, in our manufacturing processes and are therefore subject to the risk of loss arising from fire. The risk of fire associated with these materials cannot be completely eliminated. Although we maintain insurance policies in line with industry standards to reduce potential losses that may be caused by fire, including business interruption insurance, our insurance coverage may not be sufficient to cover all of our potential losses due to a fire. If any of our fabs were to be damaged or cease operations as a result of a fire, or if our insurance proves to be inadequate, it may reduce our manufacturing capacity and revenues. In addition, a power outage, even of very limited duration, may result in a loss of wafers in production, deterioration in our fab yield and substantial downtime to reset equipment before resuming production.

Possible product returns could harm our business.

Products manufactured by us may be returned within specified periods if they are defective or otherwise fail to meet customers' prior agreed upon specifications. Although product returns have historically been less than 1% of revenues, future product returns in excess of established provisions, if any, may have an adverse effect on our business and financial condition.

16

We are subject to risks related to our international operations.

We have generated revenue from customers located in India, Asia-Pacific and in Europe. Because of our international operations, we are vulnerable to the following risks:

- we price our products primarily in US dollars; if the Euro, Yen or other currencies weaken relative to the US dollar, our products may be relatively more expensive in these regions, which may result in a decrease in our revenue;
- the burdens and costs of compliance with foreign government regulation, as well as compliance with a variety of foreign laws;
- general geopolitical risks such as political and economic instability, international terrorism, potential hostilities and changes in diplomatic and trade relationships;
- natural disasters affecting the countries in which we conduct our business;
- imposition of regulatory requirements, tariffs, import and export restrictions and other trade barriers and restrictions including the timing and availability of export licenses and permits;
- adverse tax rules and regulations;
- weak protection of our intellectual property rights;
- delays in product shipments due to local customs restrictions;
- laws and business practices favoring local companies;
- difficulties in collecting accounts receivable; and
- difficulties and costs of staffing and managing foreign operations.

In addition, Israel, the United States, Japan and other foreign countries may implement quotas, duties, taxes or other charges or restrictions upon the importation or exportation of our products, leading to a reduction in sales and profitability in that country. The geographical distance and separation between Israel, the United States, Japan and the rest of Asia and Europe also creates a number of logistical and communication challenges. We cannot assure you that we will not experience any serious harm in connection with our international operations.

Our business may suffer if we are unable to retain and recruit qualified personnel.

We depend on the continued services of our executive officers, senior managers and skilled technical and other personnel. Our business may suffer if we lose the services of some of these personnel because we may not be able to find and adequately integrate replacement personnel into our operations in a timely manner. We seek to recruit highly qualified personnel and there is intense competition for the services of these personnel in the semiconductor industry. Competition for personnel may increase significantly in the future as new fabless semiconductor companies as well as new semiconductor manufacturing facilities are established. Our ability to retain existing personnel and attract new personnel is in part dependent on the compensation packages we offer. As demand for qualified personnel increases, we may be forced to increase the compensation levels and to adjust the cash, equity and other components of compensation we offer our personnel.

17

Our business plan is premised on the increasing use of outsourced foundry services by both fabless semiconductor companies and integrated device manufacturers for the production of semiconductors using specialty process technologies. Our business may not be successful if this trend does not continue to develop in the manner we expect.

We operate as an independent semiconductor foundry focused primarily on specialty process technologies. Our business model assumes that demand for these processes within the semiconductor industry will grow and will follow the broader trend towards outsourcing foundry operations. Although the use of foundries is established and growing for standard CMOS processes with smaller and smaller geometries, the use of outsourced foundry services for specialty process technologies is less common and may never develop into a significant part of the semiconductor industry. If fabless companies and vertically integrated device manufacturers opt not to, or determine that they cannot, reduce their costs or allocate resources and capital more efficiently by accessing independent specialty foundry capacity, the manufacture of specialty process technologies may not follow the trend of standard CMOS processes. If the broader trend to outsourced foundry services does not prove applicable to the specialty process technologies that we are focused on, our business, results of operations and cash flow may be harmed.

If we are unable to collaborate successfully with electronic design automation vendors and third-party design service companies to meet our customers’ design needs, our business may be harmed.

We have established relationships with electronic design automation vendors and third-party design service companies. We work together with these vendors to develop complete design kits that our customers can use to meet their design needs using our process technologies. Our ability to meet our customers’ design needs successfully depends on the availability and quality of the relevant services, tools and technologies provided by electronic design automation vendors and design service providers, and on whether we, together with these providers, are able to meet customers’ schedule and budget requirements. Difficulties or delays in these areas may adversely affect our ability to meet our customers’ needs, and thereby may harm our business.

Failure to comply with existing or future governmental regulations may reduce our sales or increase our manufacturing costs.

The semiconductors we produce and the export of technologies used in our manufacturing processes may be subject to U.S., Israeli and/or Japanese export control and other regulations as well as various standards established by authorities in other countries. Failure to comply with existing or evolving U.S., Israeli, Japanese or foreign governmental regulation or to obtain timely domestic or foreign regulatory approvals or certificates may materially harm our business by reducing our sales, requiring modifications to our processes so that they would not require an export license or by requiring excessive modifications to our customers’ products. Neither we nor our customers may export products using or incorporating controlled technology without obtaining an export license. Governmental restrictions may make foreign competitors facing less stringent controls on their processes and their customers’ products more competitive in the global market than the Company or its customers. The U.S., Israeli and/or Japanese governments may not approve any pending or future export license requests. In addition, the list of products and countries for which export approval is required, and the regulatory policies with respect thereto, may be revised from time to time.

In the event that Jazz engages in a Special Security Agreement with the United States Department of Defense, it may limit the synergies and other expected benefits of the merger with Jazz.

In connection with Jazz’s aerospace and defense business, its facility security clearance and trusted foundry status, we are working with the Defense Security Service of the United States Department of Defense ("DSS") to develop an appropriate structure to mitigate any concern of foreign ownership, control or influence over the operations of Jazz specifically relating to protection of classified information and the prevention of potential unauthorized access thereto. In order to safeguard classified information, it is expected that the DSS will require the adoption of a Special

Security Agreement ("SSA"). The SSA may include certain security related restrictions, including restrictions on the composition of the board of directors, the separation of certain employees and operations, as well as restrictions on disclosure of classified information to Tower. The provisions contained in the SSA may also limit the synergies and other benefits realized from the merger with Jazz. There is no assurance when, if at all, an SSA will be reached.

If the integrated circuits we manufacture are integrated into defective products, we may be subject to product liability or other claims which may damage our reputation and harm our business.

Our customers integrate our custom integrated circuits into their products which they then sell to end users. If these products are defective or malfunction, we may be subject to product liability claims, as well as possible recalls, safety alerts or advisory notices relating to the product. We cannot assure you that our insurance policies will be adequate to satisfy claims that may be made against us. We may also be unable to obtain insurance in the future at satisfactory rates, in adequate amounts, or at all. Product liability claims or product recalls in the future, regardless of their ultimate outcome, may have a material adverse effect on our business, reputation, financial condition and on our ability to attract and retain customers.

A significant portion of Fab 3's workforce is unionized, and its operations may be adversely affected by work stoppages, strikes or other collective actions which may disrupt its production and adversely affect the yield of its fab.

A significant portion of Fab 3's employees at its Newport Beach, California fab are represented by a union and covered by a collective bargaining agreement that is scheduled to expire in 2012. We cannot predict the effect that continued union representation or future organizational activities will have on Jazz's business. We cannot assure you that Jazz will not experience a material work stoppage, strike or other collective action in the future, which may disrupt its production and adversely affect its customer relations and operational results.

The production yields and business of Fab 3 and Fab 4 could be significantly harmed by natural disasters, particularly earthquakes.

Fab 3 is located in southern California, a region known for seismic activity. Fab 4 is located in Japan, in a region that was not affected by the 2011 earthquake but is generally susceptible to seismic activity. Due to the complex and delicate nature of our manufacturing processes, the facilities are particularly sensitive to the effects of vibrations associated with even minor earthquakes. Fab 3 and Fab 4's respective business operations depend on their ability to maintain and protect their facilities, computer systems and personnel. We cannot be certain that precautions Fab 3 and Fab 4 have taken to seismically upgrade their fab will be adequate to protect their facilities in the event of a major earthquake, and any resulting damage may seriously disrupt Fab 3 and Fab 4's production and result in reduced revenues. During March 2011, an earthquake off the eastern coast of Japan triggered a devastating tsunami tidal wave causing vast damage, although far from the Fab 4 site leaving Fab 4 unaffected. The effects of this tsunami continue to weigh on the economy of Japan and it is difficult to predict the continued long-term impact of this disaster. In addition, we have no insurance coverage which may compensate us for losses that may incurred as a result of earthquakes, and any such losses or damages incurred by us may have a material adverse effect on our business.

Climate change may negatively affect our business.

There is increasing concern that climate change is occurring and may have dramatic effects on human activity without aggressive remediation steps. Public expectations for reductions in greenhouse gas emissions may result in increased energy, transportation and raw material costs.

Scientific examination of, political attention to and rules and regulations on issues surrounding the existence and extent of climate change may result in increased production costs due to increase in the prices of energy and introduction of energy or carbon tax. A variety of regulatory developments have been introduced that focus on restricting or managing emissions of carbon dioxide, methane and other greenhouse gases. Enterprises may need to purchase new equipment at higher costs or raw materials with lower carbon footprints. These developments and further legislation that is likely to be enacted may adversely affect our operations. Changes in environmental regulations, such those on the use of per fluorinated compounds, may increase our production costs, which may adversely affect our results of operation and financial condition.

In addition, more frequent droughts and floods, extreme weather conditions and rising sea levels may occur due to climate change. For example, transportation suspension caused by extreme weather conditions may harm the distribution of our products. We cannot predict the economic impact, if any, of disasters or climate change.

Compliance with the US Conflict Minerals Law may affect our ability or the ability of our suppliers to purchase raw materials at an effective cost.

Many industries rely on materials which are subject to regulation concerning certain minerals sourced from the Democratic Republic of Congo or adjoining countries, which include: Sudan; Uganda; Rwanda; Burundi; United Republic of Tanzania; Zambia; Angola; Congo; and Central African Republic. These minerals are commonly referred to as conflict minerals. Conflict minerals which may be used in our industry or by our suppliers include Columbite-tantalite (derivative of tantalum [Ta]), Cassiterite (derivative of tin [Sn]), gold [Au], Wolframite (derivative of tungsten [W]), and Cobalt [Co]. Under present regulations, we and our customers are required to survey and disclose whether our processes or products use or rely on conflict minerals. The SEC has proposed draft regulations that would require companies to disclose the use of conflict materials. Although we expect that we and our vendors will be able to comply with the requirements, there can be no guarantee that we will be able to gather all the information required from our vendors. In addition, there is increasing public sentiment that companies should avoid using conflict materials from the DRC and adjoining countries. Although we believe our suppliers do not rely on such conflict materials, there can be no guarantee that we will continue to be able to obtain adequate supplies of materials needed in our production from supply chains outside the DRC and adjoining countries. A failure to obtain necessary information or to maintain adequate supplies of materials from supply chains outside the DRC and adjoining countries may delay our production, increasing the risk of losing customers and business.

Risks relating to construction activities adjacent to Fab3.

In December 2010, the properties which Jazz leases for its fabrication facilities and headquarters were sold to real estate investment firm based in Irvine, California. In connection with the sale, Jazz negotiated amendments to its operating leases that confirm its ability to remain in the fabrication facilities through 2017 and to exercise options to extend that lease through 2027. The new owner has expressed its intention to begin development of a portion of the property adjacent to Fab 3, with the first phase of development of mixed use townhouses, midrise and hi-rise condominium potentially beginning in 2014 or thereafter. In the amendments to its leases, Jazz secured various contractual safeguards designed to limit and mitigate any adverse impact of construction activities on its fabrication operations. Although Jazz does not anticipate a material adverse impact to its operations, it is possible that construction activities adjacent to its fabrication facility may result in temporary reductions or interruptions in the supply of utilities to the property and that a portion or all of the fabrication facility may need to be idled temporarily during development. If construction activities limit or interrupt the supply of water, gas or electricity to Fab 3 or cause significant vibrations or other disruptions, it may limit or delay Fab 3's production, which may adversely affect its business and operating results. In addition, an unplanned power outage caused by construction activities, even of very limited duration, may result in a loss of wafers in production, deterioration in our fab yield and substantial downtime to reset equipment before resuming production.

Risks Related to Our Securities

The repayment of Tower's outstanding debentures is subordinated to Tower's indebtedness to its banks and obligations to secured creditors and Jazz’s repayment of its notes is subordinated to Jazz's secured indebtedness to its banks.

The repayment of Tower's outstanding debentures is subordinated to (i) the timely repayment of Tower’s $131 million bank loans under Tower’s amended facility agreement, (ii) any obligations to the Investment Center of the Israeli Ministry of Industry, Trade and Labor under the Investment Center’s “Approved Enterprise” programs in relation to Fab 2. Tower has not guaranteed any of Jazz's debt, including Jazz's debt under its bank loan and Jazz's debt to its notes holders. In addition repayment of Jazz's notes is subordinated to the prior payment of approximately $15.3 million payable in regard to Jazz's secured bank loans as of December 31, 2011. As a result, upon any distribution to Tower or Jazz’s creditors, as applicable, in liquidation or reorganization or similar proceedings, these secured creditors will be entitled to be paid in full before any payment may be made with respect to Tower or Jazz’s outstanding debentures or note holders, as applicable. In any of these circumstances, Tower, or Jazz, as applicable, may not have sufficient assets remaining to pay amounts due on any or all of their respective debentures or notes then outstanding. In addition, neither Tower nor Jazz, as applicable, is permitted under the terms of their respective facility agreements to make a payment on account of their respective debentures or notes, as applicable, if on the date of such payment an “Event of Default” exists under the applicable facility agreement.

Tower’s stock price may be volatile in the future.

The stock market, in general, has experienced extreme volatility that often has been unrelated to the operating performance of particular companies. In particular, the stock prices for many companies in the semiconductor industry have experienced wide fluctuations, which have often been unrelated to the operating performance of such companies. These broad market and industry fluctuations may adversely affect the market price of Tower’s ordinary shares, regardless of Tower’s actual operating performance.

In addition, it is possible that in some future periods Tower’s operating results may be below the expectations of public market analysts and investors. In this event, the price of Tower’s securities may underperform or fall.

Market sales of large amounts of Tower’s ordinary shares eligible for future sale, or even the perception that such sales may occur, may depress the market price of Tower’s ordinary shares and may impair our ability to raise capital through the sale of Tower securities.

Market sales of large amounts of Tower’s ordinary shares eligible for future sale, or even the perception that such sales may occur, may depress the market price of Tower’s ordinary shares. Of Tower’s approximately 318 million outstanding ordinary shares as of December 31, 2011, only approximately 34 million are held by affiliates. The balance is held by non-affiliates of Tower. In addition, as described below, a substantial number of Tower ordinary shares are issuable under capital notes, options, warrants and convertible notes, a majority of which are or may be registered upon demand of the holders or may be sold subject to the volume and manner of sale requirements of Rule 144. A conversion or exercise of a material portion of such convertible securities, or even the perception that such a conversion or exercise may occur, may depress the market price of Tower’s ordinary shares and may impair our ability to raise capital through the sale of Tower securities.

Issuance of ordinary shares may dilute the percentage of current and future shareholders.

As of December 31, 2011, we had approximately 318 million ordinary shares outstanding. We may issue additional ordinary shares that may result in dilution of the percentage of our ordinary shares held by current and future shareholders. As detailed in Item 7, Major Shareholders and in Note 17 to our consolidated financial statements included in the annual report, we are obligated to issue a significant amount of shares or convertible securities to our banks, employees, CEO, directors, bond holders, warrant holders and Israel Corp, under our issued warrants, capital notes, options and convertible debentures. In addition, we may execute on additional financings in the future, which may involve the issuance of additional ordinary shares or securities that are convertible into or exercisable for the purchase of ordinary shares, which may materially dilute the holdings of our shareholders.

If our ordinary shares do not trade on NASDAQ as or above $1.00 for ten consecutive days by September 2012, NASDAQ may delist our ordinary shares. While we will continue to be traded in Tel Aviv stock exchange, a delisting from NASDAQ may have a negative impact on the trade of our shares in the U.S and limit our ability to find available financing sources and limit the market exposure to our business.

On September 19, 2011, NASDAQ Listing Qualifications sent a letter to us indicating that we do not meet the requirement of maintaining a minimum bid price of $1.00 per share for our listed securities as set forth in Listing Rule 5450(a)(1). We originally had until March 19, 2012 to regain compliance. We did not regain compliance by that date and we availed ourselves of an additional 180 days extension by transfer of our NASDAQ listing to the NASDAQ Capital Market. As a result of the transfer, we can regain compliance with this requirement if at any time during the 180-day period ending on September 17, 2012. There is no assurance that the closing bid price for our ordinary shares will be at least at $1.00 for ten consecutive business days prior to September 17, 2012, which means that we may be in a position in which we may need to choose between: (i) delisting from the NASDAQ or (ii) taking other actions to avoid the delisting of our ordinary shares, such as implementing a reverse stock split. Even though we will continue to be traded on the Tel Aviv stock exchange in the event that we are delisted from NASDAQ, such a delisting from NASDAQ may have a negative impact on the trade of our shares in the U.S and limit our ability to find available financing sources and limit the market exposure to our business.

Any inability to comply with Section 404 of the Sarbanes−Oxley Act of 2002 regarding internal control attestation may negatively impact the report on our financial statements to be provided by our independent auditors.

We are subject to the reporting requirements of the United States Securities and Exchange Commission, or the SEC. The SEC, as directed by Section 404(a) of the United States Sarbanes−Oxley Act of 2002, adopted rules requiring public companies to include a management report assessing the Company’s effectiveness of internal control over financial reporting and an attestation thereof by its auditors in its annual report on Form 20−F. Our management and/or our auditors may conclude that our internal controls over financial reporting are not effective. Such a conclusion could result in a loss of investor confidence in the reliability of our financial statements, which could negatively impact the market price of our shares and our ability to access the capital markets.

Risks Related to Our Operations in Israel

Instability in Israel may harm our business.

Tower's Fab 1 and Fab 2 manufacturing facilities and certain of its corporate and sales offices are located in Israel. Accordingly, political, economic and military conditions in Israel may directly affect our business. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its Arab neighbors. In addition, Israel and companies doing business with Israel have, in the past, been the subject of an economic boycott. Although Israel has entered into various agreements with Egypt, Jordan and the Palestinian Authority, Israel has been and is subject to terrorist activity, with varying levels of severity. Parties with whom we do business have sometimes declined to travel to Israel during periods of heightened unrest or tension, forcing us to make alternative arrangements where necessary. In addition, the political and security situation in Israel may result in parties with whom we have agreements claiming that they are not obligated to perform their commitments under those agreements pursuant to force majeure provisions. We can give no assurance that security and political conditions will not adversely impact our business in the future. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its present trading partners could adversely affect our operations and make it more difficult for us to raise capital. Furthermore, Fab 1 and Fab 2 manufacturing facilities are located exclusively in Israel. We could experience serious disruption of our manufacturing in Israel if acts associated with this conflict result in any serious damage to our manufacturing facilities. In addition, our business interruption insurance may not adequately compensate us for losses that may be incurred, and any losses or damages incurred by us could have a material adverse effect on our business.

Our operations may be negatively affected by the obligations of our Israeli personnel to perform military service.

In the event of severe unrest or other conflict, Israeli individuals could be required to serve in the military for extended periods of time. In response to increases in terrorist activity, there have been periods of significant call-ups of Israeli military reservists, and it is possible that there will be additional call-ups in the future. While we have operated effectively despite these conditions in the past, we cannot assess what impact these conditions may have in the future. Many male Israeli citizens, including most of Tower's male employees under the age of 40, are subject to compulsory military reserve service and may be called to active duty under emergency circumstances. Our operations in Israel could be disrupted by the absence for a significant period of time of one or more of our key employees or a significant number of our other employees due to military service. Such disruption could harm our operations.

If the exemption allowing us to operate our Israeli manufacturing facilities seven days a week is not renewed, our business will be adversely affected.

We operate our Israeli manufacturing facilities seven days a week pursuant to an exemption from the law that requires businesses in Israel to be closed from sundown on Friday through sundown on Saturday. This exemption expires by its terms on December 31, 2012. If the exemption is not renewed and we are forced to close any or all of the Israeli facilities for this period each week, our financial results and business will be harmed.

It may be difficult to enforce a US judgment against us, our officers, directors and advisors or to assert US securities law claims in Israel.

Tower is incorporated in Israel. Most of Tower's executive officers and directors and our Israeli accountants and attorneys are nonresidents of the United States, and a majority of Tower's assets (excluding its U.S. subsidiaries and their assets) and the assets of these persons are located outside the United States. Therefore, it may be difficult to enforce a judgment obtained in the United States, against Tower or any of these persons, in US or Israeli courts based on the civil liability provisions of the US federal securities laws, except to the extent that such judgment could be enforced in the U.S. against Tower's U.S. subsidiaries. Additionally, it may be difficult for you to enforce civil liabilities under US federal securities laws in original actions instituted in Israel.

ITEM 4. INFORMATION ON THE COMPANY

A. HISTORY AND DEVELOPMENT OF THE COMPANY

We are a pure-play independent specialty foundry dedicated to the manufacture of semiconductors. Typically, pure-play foundries do not offer products of their own, but focus on producing integrated circuits, or ICs, based on the design specifications of their customers. We manufacture semiconductors using production processes for our customers primarily based on third party designs and our own proprietary designs. We currently offer the manufacture of ICs with geometries ranging from 1.0 to 0.095-micron. We also provide design services and complementary technical services. ICs manufactured by us are incorporated into a wide range of products in diverse markets, including consumer electronics, personal computers, communications, automotive, industrial and medical device products.

We are focused on establishing leading market share in high-growth specialized markets by providing our customers with high-value wafer foundry services. Our historical focus has been standard digital complementary metal oxide semiconductor (“CMOS”) process technology, which is the most widely used method of producing ICs. We are currently focused on the emerging opportunities in the fields of CMOS image sensors, mixed-signal, radio frequency CMOS (RFCMOS), bipolar CMOS (BiCMOS), and silicon-germanium BiCMOS (SiGe BiCMOS or SiGe), high voltage CMOS, radio frequency identification (RFID) technologies and power management. To better serve our customers, we have developed and are continuously expanding our technology offerings in these fields. Through our expertise and experience gained over eighteen years of operation, we differentiate ourselves by creating a high level of value for our clients through innovative technological processes, design and engineering support and services, competitive manufacturing indices, and dedicated customer service.

Tower was founded in 1993, with the acquisition of National Semiconductor’s 150-mm wafer fabrication facility located in Migdal Haemek, Israel, and commenced operations as an independent foundry. Since then, we have significantly upgraded our Fab 1 facility, equipment, capacity and technologies’ capabilities with process geometries ranging from 1.0-micron to 0.35-micron and enhanced our process technologies to include CMOS image sensors, embedded flash, advanced analog, RF (radio frequency) and mixed-signal technologies. Depending on the process technology and product mix, Fab 1 is capable of achieving capacity levels of approximately 20,000 wafers per month.

In 2003, we commenced production in Fab 2, a wafer fabrication facility we established in Migdal Haemek, Israel. Fab 2 supports geometries ranging from 0.35 to 0.13-micron, using advanced CMOS technology, including CMOS image sensors, embedded flash, advanced analog, RF (radio frequency), power platforms and mixed-signal technologies. Depending on the process technology and product mix, when fully ramped-up we estimate that Fab 2 will be capable of achieving capacity levels of approximately 45,000 wafers per month. We have not completed the full ramp-up of Fab 2. The timing of that decision and its implementation will depend upon several factors, including, funding, cost availability of equipment and market conditions.

In September 2008, we merged with Jazz Technologies. Jazz focuses on specialty process technologies for the manufacture of analog and mixed-signal semiconductor devices. Jazz's specialty process technologies include advanced analog, radio frequency, high voltage, bipolar and silicon germanium bipolar complementary metal oxide (“SiGe”) semiconductor processes. ICs manufactured by Jazz are incorporated into a wide range of products, including cellular phones, wireless local area networking devices, digital TVs, set-top boxes, gaming devices, switches, routers and broadband modems. Jazz operates one semiconductor fabrication facility in Newport Beach, California (“Fab 3”). Fab 3 supports geometries ranging from 0.80 micron to 0.13-micron. Depending on the process technology and product mix, Fab 3 is capable of achieving capacity levels of approximately 22,000 wafers per month. The merger has provided several key benefits, including increased global capacity, a larger customer base, a more comprehensive product portfolio and a stronger financial base.

In June 2011, we acquired a fabrication facility in Nishiwaki City, Hyogo, Japan (Fab 4) from Micron, which is capable of manufacturing approximately 60,000 wafers per month, depending on the process technology and product mix. The assets and related business that we acquired from Micron are held and conducted through a wholly owned Japanese subsidiary, TowerJazz Japan Ltd. (TJP). Fab 4 supports geometries ranging from 0.13 to 0.095-micron to manufacture DRAM and CMOS image sensor products, and we are currently in the process of bringing in other process technologies to Fab 4 to enable it to manufacture other products.

Our executive offices and Israeli manufacturing facilities are located in the Ramat Gavriel Industrial Park, Shaul Amor Street, Post Office Box 619, Migdal Haemek, 23105 Israel, and our telephone number is 972-4-650-6611. Our agent for service of process in the United States is Tower Semiconductor USA Inc. located at 2350 Mission College Blvd. Suite 500, Santa Clara, CA 95054.

For more information about us, go to www.towerjazz.com. Information on our web site is not incorporated by reference in this annual report.

B. BUSINESS OVERVIEW

INDUSTRY OVERVIEW

PROLIFERATION OF ANALOG AND MIXED-SIGNAL SEMICONDUCTORS AND THE GROWING NEED FOR SPECIALTY PROCESS TECHNOLOGIES

Semiconductor devices are responsible for the rapid growth of the electronics industry over the past fifty years. They are critical components in a variety of applications, from computers, consumer electronics and communications, to industrial, military, medical and automotive applications. Rapid changes in the semiconductor industry frequently make recently introduced devices and applications obsolete within a very short period of time. With the increase in their performance and decrease in their size and cost, the use of semiconductors and the number of their applications have increased significantly.

Historically, the semiconductor industry was composed primarily of companies that designed and manufactured ICs in their own fabrication facilities. These companies, such as Intel and IBM, are known as integrated device manufacturers, or IDMs. In the mid-1980s, fabless IC companies, which focused on IC design and used external manufacturing capacity, began to emerge. Fabless companies initially outsourced production to IDMs, which filled this need through their excess capacity. As the semiconductor industry continued to grow, increasing competition forced fabless companies and IDMs to seek reliable and dedicated sources of IC manufacturing services. Use of external manufacturing capacity allowed IDMs to reduce their investment in their existing and next-generation manufacturing facilities and process technologies, and gain access to external manufacturing process technologies and production capacity. This need for external manufacturing process technologies has led to the development of independent companies, known as foundries, which focus primarily on providing IC manufacturing services to semiconductor suppliers. Foundry services are used by nearly all major semiconductor companies in the world, including IDMs, as part of a dual-source, risk-diversification and cost effectiveness strategy.

Semiconductor suppliers face increasing demands for new products that provide higher performance, greater functionality and smaller form factors at lower prices, features that require increasingly complex ICs. The industry has experienced a dramatic increase in the number of applications for semiconductors. Further, in order to compete successfully, semiconductor suppliers must minimize the time it takes to bring a product to market. As a result, fabless companies and IDMs have focused more on their core competencies, design and intellectual property, and tend to outsource manufacturing to foundries.

The two basic functional technologies for semiconductor products are digital and analog. Digital semiconductors provide critical processing power and have helped enable many of the computing and communication advances of recent years. Analog semiconductors monitor and manipulate real world signals such as sound, light, pressure, motion, temperature, electrical current and radio waves, for use in a wide variety of electronic products such as digital still cameras, X-Ray medical applications, flat panel displays, personal computers, cellular handsets, telecommunications equipment, consumer electronics, automotive electronics and industrial electronics. Analog-digital, or mixed-signal, semiconductors combine analog and digital devices on a single chip to process both analog and digital signals.

Integrating analog and digital components on a single, mixed-signal semiconductor enables the development of smaller, more highly integrated, power-efficient, feature-rich and cost-effective semiconductor devices but presents significant design and manufacturing challenges. For example, combining high-speed digital circuits with sensitive analog circuits on a single, mixed-signal semiconductor can increase electromagnetic interference and power consumption, both of which cause a higher amount of heat to be dissipated and decrease the overall performance of the semiconductor. Challenges associated with the design and manufacture of mixed-signal semiconductors increase as the industry moves toward more advanced process geometries. As a result, analog and mixed-signal semiconductors can be complex to manufacture and typically require sophisticated design expertise and strong application specific experience and intellectual property. In addition, today's analog market is driven strongly by growing sensitivity to environmental requirements such as the conservation of energy, and human well being, as applications designed for diagnostics, medical devices, entertainment, infotainment and safety are all developed using analog technology.

Mixed-signal ICs are an essential part of any front-end electronic system. Our advanced analog CMOS process technologies have more features than standard analog CMOS process technologies and are well suited for higher performance or more highly integrated analog and mixed-signal semiconductors, such as high-speed analog-to-digital or digital-to-analog converters and mixed-signal semiconductors with integrated data converters. These process technologies generally incorporate higher density passive components, such as capacitors and resistors, as well as improved active components, such as native or low voltage devices, and improved isolation techniques, into standard analog CMOS process technologies.

The enormous costs associated with modern fabs, combined with the increasing demand for complex ICs, has created an expanding market for outsourced foundry manufacturing. Foundries can cost-effectively supply advanced ICs to even the smallest fabless companies by creating economies of scale through pooling the demand of numerous customers. In addition, customers whose IC designs require process technologies other than standard digital CMOS have created a market for independent foundries that focus on providing specialized process technologies. Thus, wafer manufacturers may also need to make a significant investment in specialty process technologies in order to manufacture these semiconductors. Specialty process technologies enable greater analog content and can reduce the die size of an analog or mixed-signal semiconductor, thereby increasing the number of dies that can be manufactured on a wafer and reducing final die cost. In addition, specialty process technologies can enable increased performance, superior noise reduction and improved power efficiency of analog and mixed-signal semiconductors compared to traditional standard CMOS processes. These specialty process technologies include advanced analog CMOS, radio frequency CMOS (RF CMOS), CMOS image sensors (CIS), high voltage CMOS, bipolar CMOS (BiCMOS), silicon germanium BiCMOS (SiGe BiCMOS), and bipolar CMOS double-diffused metal oxide semiconductor (BCD). We have mastered the skills required to work in technology environment which is rapidly changed, we work closely with our customers to provided them with unique and specialized solutions needed to their business success .

Foundries also offer competitive customer service through design, testing, and other technical services, often at a level previously found only at an IDM's internal facilities.

MANUFACTURING PROCESSES AND SPECIALIZED TECHNOLOGIES

We manufacture ICs on silicon wafers, generally using the customer’s proprietary circuit designs. In some cases, we use third-party or our own proprietary design elements. The end product of our manufacturing process is a silicon wafer containing multiple identical ICs. In most cases, our customer assumes responsibility for dicing, assembly, packaging and testing.

We provide wafer fabrication services to fabless IC companies and IDMs and enable smooth integration of the semiconductor design and manufacturing processes. By doing so, we enable our customers to bring high-performance, highly integrated ICs to market rapidly and cost effectively. We believe that our technological strengths and emphasis on customer service have allowed us to develop a unique position in large, high-growth specialized markets for CMOS image sensors, RF, power management and high performance mixed signal ICs. We serve as a sole source or alternative provider of foundry services.

We manufacture using specialty process technologies, mostly based on CMOS process platforms with added features to enable improved size, performance and cost characteristics for analog and mixed-signal semiconductors. Products made with our specialty process technologies are typically more complex to manufacture than products made using standard process technologies employing similar line widths. Generally, customers who use our specialty process technologies cannot easily transfer designs to another foundry because the analog characteristics of the design are dependent upon the implementation of its applicable process technology. The relatively small engineering community with specialty process expertise has also limited the number of foundries capable of offering specialty process technologies.

The specialty process design infrastructure is complex and includes design kits and device models that are specific to the foundry in which the process is implemented and to the process technology itself. We believe that our specialized process technologies combined with design enablement capabilities distinguish our IC manufacturing services and attract industry-leading customers.

We are a trusted, customer-oriented service provider that has built a solid reputation in the foundry industry over the last eighteen years. We have built strong relationships with customers, who continue to use our services, even as their demands evolve to smaller form factors and new applications. Our consistent focus on providing high-quality, value added services, including engineering and design support, has allowed us to attract customers who seek to work with a proven provider of foundry solutions. Our emphasis on working closely with customers and accelerating the time-to-market of our customers’ next-generation products has enabled us to maintain a high customer retention rate and increase the number of new customers and new products for production.

We derived a very significant amount of our revenues for the year ended December 31, 2011 from our target specialized markets: CMOS image sensors, wireless communication, RF-SiGe, high performance analog and power ICs. We are highly experienced in these markets, having been an early entrant and having developed unique proprietary technologies, including through licensing and joint development efforts with our customers and other technology companies.

The specific process technologies that we currently focus on include: CMOS image sensors (CIS), advanced analog CMOS, radio frequency CMOS (RF CMOS), radio frequency identification (RFID), bipolar CMOS (BiCMOS), silicon germanium (SiGe BiCMOS), high voltage CMOS, and bipolar CMOS double-diffused metal oxide semiconductor (BCD) and power LDMOS.

In November 2009, Tower entered into a definitive agreement with an Asian entity. Under the agreement, Tower provides turnkey manufacturing solutions and arranges for the required manufacturing know-how, training and certain assets required for the capacity ramp-up of the Asian entity.

CMOS Image Sensors

CMOS image sensors are ICs used to capture an image in a wide variety of consumer, communications, medical, automotive and industrial market applications, including camera-equipped cell phones, digital still and video cameras, security and surveillance cameras and video game consoles. Our dedicated manufacturing and testing processes assure consistently high electro-optical performance of the integrated sensor through wafer-level characterization. Our CMOS image sensor processes have demonstrated superior optical characteristics, excellent spectral response and high resolution and sensitivity. The ultra-low dark current, high efficiency and accurate spectral response of our photodiode enable faithful color reproduction and acute detail definition.

We are currently actively involved in the high-end sensor and applications specific markets, which include applications such as high end video, industrial machine vision, dental x-ray, medical x-ray and automotive sensors.

We recognized the market potential of using CMOS process technology for a digital camera-on-a-chip, which would integrate a CMOS image sensor, filters and digital circuitry. Upon entering the CMOS image sensor foundry business, we utilized research and development work that had been ongoing since 1993. Our services include a broad range of turnkey solutions and services, including pixel IP services, optical characterization of a CMOS process, innovative patented stitching manufacturing technique and optical testing and packaging. The CMOS image sensors that we manufacture deliver outstanding image quality for a broad spectrum of digital imaging applications.

Specifically, our CIS portfolio includes, 2.2 micron 2.8 micron 3.2 micron, 3.6 micron pixels and larger pixels, all developed by us. Our advanced photo diode (APD) technology used in CMOS image sensors enables improved optical and electrical performance of pixels utilizing deep sub-micron process technologies, thus enabling the manufacturing of very sophisticated and high performance camera module solutions.

For the X-ray market, we offer our innovative patented "stitching" technology in Fab 2 on 0.18-micron process and a variety of 15 to 150-micron pixels that are optimized for X-ray applications. These pixels are used by our customers in dental and other medical X-ray products. Our stitching technology enables semiconductor exposure tools to manufacture single ultra high-resolution CMOS image sensors containing millions of pixels at sizes far larger than their existing field. This technology is also used by us in the manufacturing of large sensors (up to one die per wafer) on 8" wafers.

In December 2007, we established a partnership with CMT Medical Technologies Ltd. ("CMT"), a leading provider of advanced digital X-ray imaging systems for medical diagnosis, to develop, market and sell X-ray detectors for medical applications. The detectors' intended use is for radiography/fluoroscopy, cardiology, angiography, mammography and similar large-size X-ray modalities. Our first 5" x 6" sensor prototype has been exhibiting outstanding results compared to all other technology currently used in the medical market. In 2009, Thales (France) acquired all of CMT's shares and became our partner in this initiative.

RF CMOS

In recent years, more and more designers opt to develop high frequency products based on RF CMOS technologies. The superior cost structure of CMOS technologies enables high volume, low cost production of such high frequency products. We used our mixed signal expertise to leverage and develop processes and provide services for customers that utilize CMOS technologies and require high frequency performance.

Our RF CMOS process technologies have more features than advanced analog CMOS process technologies and are well suited for wireless semiconductors, such as highly integrated wireless transceivers, power amplifiers, and television tuners. These process technologies generally incorporate integrated inductors, high performance variable capacitors, or varactors, and RF laterally diffused metal oxide semiconductors into an advanced analog CMOS process technology. In addition to the process features, RF offering includes design kits with RF models, device simulation and physical layouts tailored specifically for RF performance. We currently have RF CMOS process technologies in 0.25 micron, 0.18 micron and 0.13 micron.

BiCMOS for RF and High Performance Analog

Our BiCMOS process technologies have more features than RF CMOS process technologies and are well suited for RF semiconductors such as wireless transceivers and television tuners. These process technologies generally incorporate high-speed bipolar transistors into an RF CMOS process. The equipment requirements for BiCMOS manufacturing are specialized, and require enhanced tool capabilities to achieve high yield manufacturing. We currently have 0.35 micron BiCMOS process technology.

Our SiGe BiCMOS process technologies have more features than BiCMOS processes and are well suited for more advanced RF and high performance analog semiconductors such as high-speed, low noise, highly integrated multi-band wireless transceivers, optical networking components, television tuners and power amplifiers. These process technologies generally incorporate a silicon germanium bipolar transistor, which is formed by the deposition of a thin layer of silicon germanium within a bipolar transistor, to achieve higher speed, lower noise, and more efficient power performance than a BiCMOS process technology. It is also possible to achieve speeds using SiGe BiCMOS process technologies equivalent to those demonstrated in standard CMOS processes that are two process generations smaller in line-width. For example, a 0.18 micron SiGe BiCMOS process is able to achieve speeds comparable to a 90 nanometer RF CMOS process. As a result, SiGe BiCMOS makes it possible to create analog products using a larger geometry process technology at a lower cost while achieving similar or superior performance to that achieved using a smaller geometry standard CMOS process technology. The equipment requirements for SiGe BiCMOS manufacturing are similar to the specialized equipment requirements for BiCMOS. We developed enhanced tool capabilities in conjunction with large semiconductor tool suppliers to achieve high yield SiGe manufacturing. We believe this equipment and related process expertise makes us one of the few silicon manufacturers with demonstrated ability to deliver SiGe BiCMOS products. We currently have 0.35 micron, 0.18 micron and 0.13 SiGe BiCMOS micron technologies available.

Power and Power Management ICs

Our high voltage CMOS and BCD process technologies have more features than advanced analog CMOS processes and are well suited for power and driver semiconductors such as voltage regulators, battery chargers, power management products and audio amplifiers. These process technologies generally incorporate higher voltage CMOS devices such as 5V, 8V, 12V, 40V and 60V LDMOS devices, and, in the case of BCD, bipolar devices, into an advanced analog CMOS process. We currently have high voltage and low Rdson BCD offerings in 0.5 micron, 0.35 micron, 0.25 micron and 0.18 micron. We have extended the high voltage options and integrated the BCD process technology into our more advanced power management technology nodes (0.35 and 0.18 micron) to enable higher levels of analog integration at voltage ranges that are suitable for automotive electronics and line power conditioning for consumer devices. We offer a cost effective and digital intensive power management platform, based on our 0.18um technology node. In 2010, we introduced two more power management platforms: an isolated platform that incorporates an EPI growth on top of a buried layer on our 0.18 micron 8" based power platform; and a 700V platform on our 6 inch line, that supports the fast growing LED lighting market. The isolated platform ramped to high volume in the second half of 2011 and the 700V platform is supposed to ramp to high volume in the second half of 2012. In addition, we have developed a unique, zero mask adder NVM solution specifically for power and power management devices on our 0.18 micron platform. This, combined with our scalable model for LDMOS devices makes our power management platform very attractive in the power IC market. We have released several Y-flash based modules to our customers which have already been integrated into their products.

In 2011 we signed an MOU with Samsung Electro Mechanics ("SEMCO") to develop high side 700V platform to be used for the power inverter market. The development is ongoing and expected to be accomplished in the fourth quarter of 2012. Ramp to production of SEMCO products as well as others on this platform is expected to occur in 2013.

We continue to invest in technology that improves performance and integration level and reduces the cost of analog and mixed-signal products. This includes improving the density of passive elements such as capacitors and inductors, improving the analog performance and voltage handling capability of active devices, and integrating additional advanced features in our specialty CMOS processes. Examples of such features currently under development include technologies aimed at integrating micro-electro-mechanical-system (MEMS) devices with CMOS, adding silicon-on-insulator (SOI) substrates to enable increased integration of RF and analog functions on a single die and scaling the features we offer today to the 0.13 micron process technology including the integration of advanced SiGe transistors with 0.13 micron CMOS and copper metallization. Ramp to mass production of our first customer on this platform is expected in 2012.

CUSTOMERS, MARKETING AND SALES

Our marketing and sales strategy seeks to aggressively expand our global customer base. We have marketing and sales support personnel in the United States, Europe, Korea, Taiwan, Japan and Israel. In 2009, we appointed a country manager in Korea. In 2010, we appointed a country manager in Europe and a country representative in China. Our marketing and sales staff is supported by independent sales representatives, located throughout the world, who have been selected based on their understanding of the semiconductor marketplace.

Our sales cycle is generally 8-26 months or longer for new customers and can be as short as 8-12 months for existing customers. The typical stages in the sales cycle process from initial contact until production are:

- technical evaluation;

- product design to our specifications including integration of third party intellectual property;
- photomask - design and third party photomask manufacturing;
- silicon prototyping;
- assembly and test;
- validation and qualification; and
- production.

The primary customers of our foundry services are fabless semiconductor companies and independent device manufacturers (IDMs). A portion of our product sales are made pursuant to long-term contracts with our customers, under which we have agreed to reserve manufacturing capacity at our production facilities for such customers. Our customers include many industry leaders. During the year ended December 31, 2011, we had four significant customers who contributed between 5% to 32% of our revenues. During the year ended December 31, 2010, we had five significant customers who contributed between 5% to 16% of our revenues. In 2009, we had three significant customers who contributed between 7% to 17% of our revenues.

The percentage of our revenues from customers located outside the United States was 21%, 31% and 22% in the years ended December 31, 2009, 2010 and 2011, respectively. Although most of our revenues are from US-based customers, we expect a substantial portion of our revenues to continue to come from customers located outside the United States. The following table sets forth the geographical distribution, by percentage, of our net revenues for the periods indicated:

	Year ended December 31,					
	2011		2010		2009	
United States	78	%	69	%	79	%
India	7	%	14	%	3	%
Asia-Pacific	8	%	8	%	10	%
Europe	5	%	7	%	5	%
Israel	2	%	2	%	3	%
Total	100	%	100	%	100	%

We price our products on a per wafer or per die basis, taking into account the complexity of the technology, the prevailing market conditions, volume forecasts, the strength and history of our relationships with the customer and our current capacity utilization. Most of our customers usually place their purchase orders only two to four months before shipment; however a few of our major customers are obligated to provide us with longer forecasts of their wafer needs.

We publish press releases, articles, white papers, perform presentations, participate in panel sessions at industry conferences, hold a variety of regional and international technology seminars, and attend and exhibit at various industry trade shows to promote our products and services. We discuss advances in our process technology portfolio and progress on specific relevant programs with our prospective and major customers as well as industry analysts and research analysts on a regular basis and publicly release any such information that we deem material or important to disclose.

Our customers use our processes to design and market a broad range of analog and mixed-signal semiconductors for diverse end markets including wireless and high-speed wireline communications, consumer electronics, automotive and industrial. We manufacture products for a wide range of electronic products including but not limited to high-performance applications such as transceivers and power management for cellular phones; transceivers and power amplifiers for wireless local area networking products; power management, audio amplifiers and driver integrated circuits for consumer electronics; tuners for digital televisions and set-top boxes; modem chipsets for broadband access devices and gaming devices; serializer/deserializers, or SerDes, for fiber optic transceivers; focal plan arrays for imaging applications; controllers for power amplifier and switching chips in cellular phones and wireline interfaces for switches and routers.

Competition

The global semiconductor foundry industry is highly competitive. We broadly compete with the pure-play advanced technology node-driven foundry service providers such as Taiwan Semiconductor Manufacturing Corporation ("TSMC"), United Microelectronics Corporation ("UMC"), Global Foundries Inc. and Semiconductor Manufacturing International Corp.("SMIC"). These four foundries primarily compete against one another and focus on 12 inch deep-submicron CMOS processing. They each also have some capacity for a narrow set of specialty process technologies. The rest of the foundry industry generally targets either industry standard 8 inch CMOS processing or specialty process technologies. It includes existing Chinese, Korean and Malaysian foundries. We compete most directly in the specialty segment with foundries such as Vanguard, DongBu, X-Fab, ASMC, Grace, HHNEC, and Silterra. We also compete with integrated device manufacturers that have internal semiconductor manufacturing capacity or foundry operations, such as IBM, that produce ICs for their own use and/or allocate a portion of their manufacturing capacity to foundry operations. Most of the foundries with which we compete are located in Asia-Pacific and benefit from their close proximity to other companies involved in the design of ICs. The principal elements of competition in the wafer foundry market are:

- technical competence;
- production quality;
- time-to-market & manufacturing cycle time;
- available capacity;
- device yields;
- design and customer support services;
- access to intellectual property;
- price;
- management expertise;
- strategic relationships;
- research and development capabilities; and
- stability and reliability of supply in order to be a trusted supplier.

Many of our competitors have greater manufacturing capacity, multiple manufacturing facilities, longer or more established relationships with their customers, a more diverse customer base, superior research and development capability, better cost structure and greater financial, marketing and other resources. As a result, these companies may be able to compete more aggressively over a longer period of time than us.

We seek to compete primarily on the basis of advanced specialty technology, breadth of product offering, production quality, technical support and our design, engineering and manufacturing services. We have a differentiated service offering and proven track record in specialized markets, which enables us to effectively compete with larger foundry service providers.

As our competitors continue to increase their manufacturing capacity, there could be an increase in specialty semiconductor capacity during the next several years. As specialty capacity increases, there may be more competition and pricing pressure on our services, and underutilization of our capacity may result. Any significant increase in competition or pricing pressure may erode our profit margins, weaken our earnings or increase our losses.

Additionally, some semiconductor companies have advanced their CMOS designs to 90 nanometer or smaller geometries. These smaller geometries may provide customers with performance and integration features that may be comparable to, or exceed, features offered by our specialty process technologies, and may be more cost-effective at higher production volumes for certain applications, such as when a large amount of digital content is required in a mixed-signal semiconductor and less analog content is required. Our specialty process technologies will therefore compete with these advanced CMOS processes for customers and some of our potential and existing customers could elect to design these advanced CMOS processes into their next generation products. We are not currently capable, and do not currently plan to become capable, of providing CMOS processes at these smaller geometries.

WAFER FABRICATION SERVICES

Wafer fabrication is an intricate process that consists of constructing layers of conducting and insulating materials on raw wafers in intricate patterns that give the IC its function. IC manufacturing requires hundreds of interrelated steps performed on different types of equipment, and each step must be completed with extreme accuracy for finished ICs to work properly. The process can be summarized as follows:

Circuit Design. IC production begins when a fabless IC company or IDM designs (or engages our design services) the layout of a device’s components and designates the interconnections between each component. The result is a pattern of components and connections that defines the function of the IC. In highly complex circuits, there may be more than 43 layers of electronic patterns. After the IC design is complete, we provide these companies with IC manufacturing services.

Mask Making. The design for each layer of a semiconductor wafer is imprinted on a photographic negative, called a reticle or mask. The mask is the blueprint for each specific layer of the semiconductor wafer.

IC Manufacturing. Transistors and other circuit elements comprising an IC are formed by repeating a series of processes in which photosensitive material is deposited on the wafer and exposed to light through a mask. Advanced IC manufacturing processes consist of hundreds of steps, including photolithography, oxidation, etching and stripping of different layers and materials, ion implantation, deposition of thin film layers, chemical mechanical polishing and thermal processing. The final step in the IC manufacturing process is wafer probe, which involves electronically inspecting each individual IC in order to identify those that are operable for assembly.

Assembly and Test. After IC manufacture, the wafers are transferred to assembly and test facilities. In the assembly process, each wafer is cut into dies, or individual semiconductors, and tested. Defective dies are discarded, while good dies are packaged and assembled. Assembly protects the IC, facilitates its integration into electronic systems and enables the dissipation of heat or cold. Following assembly, the functionality, voltage, current and timing of each IC is tested. After testing, the completed IC is shipped to the customer.

33

Procurement and Sourcing

Our manufacturing processes use many highly specialized materials, including silicon wafers, chemicals, gases, photomasks and various metals. These raw materials generally are available from several suppliers. In many instances, we purchase raw materials from a single source to obtain preferred pricing. In those cases, we generally also seek to identify, and in some cases qualify, alternative sources of supply.

In addition, we have agreements with several key material suppliers under which they hold similar levels of inventory at our warehouse and fab for our use. We are not obliged under these agreements to purchase raw material inventory that is held by our vendors at our sites until we actually use it, unless we hold the inventory beyond specified time limits.

RESEARCH AND DEVELOPMENT

Our future success depends, to a large degree, on our ability to continue to successfully develop and introduce to production advanced process technologies that meet our customers' needs. Our process development strategy relies on CMOS process platforms that we license and transfer from third parties or develop ourselves.

From time to time, at a customer's request, we develop a specialty process module, which in accordance with the applicable agreement may be used for such customer on an exclusive basis, or added to our process offering. Such developments are very common in all of our special process technologies noted above.

Our research and development activities have related primarily to our process, device and design development efforts in all specialty areas that were mentioned above, and have been sponsored and funded by us and in certain cases with some participation by the Israeli Office of the Chief Scientist, or OCS. Accordingly, Tower is subject to restrictions set forth in Israeli law which limit the ability of a company to transfer technologies outside of Israel, if such technologies were developed with OCS funding.

Our research and development activities seek to upgrade and integrate our manufacturing technologies and processes. We maintain a central research and development team primarily responsible for developing cost-effective technologies that can serve the manufacturing needs of our customers. A substantial portion of our research and development activities are undertaken in cooperation with our customers and equipment vendors. Due to the rapid changes in technology that characterize the semiconductor industry, effective research and development is essential to our success. We plan to continue to invest significantly in research and development activities in order to develop advanced process technologies for new applications.

Research and development expenses for the years ended December 31, 2009, 2010 and 2011 were $23.4 million, $23.9 million and $24.9 million, net of government participation of $2.0 million, $2.7 million and $2.4 million, respectively. As of December 31, 2011, we employed 164 professionals in our research and development departments, 36 of whom have PhDs. In addition to our research and development departments located at our facilities in Migdal Haemek, Israel, in Newport Beach, California and in Nishiwaki, Japan, we maintain a design center in Netanya, Israel.

PROPRIETARY RIGHTS

Intellectual Property and Licensing Agreements

Our success depends in part on our ability to obtain patents, licenses and other intellectual property rights covering our production processes. To that end, we have obtained certain patents, acquired patent licenses and intend to continue to seek patents on our production processes.

As of March 31, 2012, we held 185 patents in force in the United States and 28 patents in force in foreign countries. We have entered into various patent and other technology license agreements, with technology companies including Synopsys, ARM, Cadence, and others, under which we have obtained rights to additional technologies.

We constantly seek to strengthen our technological expertise through relationships with technology companies. We seek to expand our core strengths in CMOS image sensors, embedded flash, power management, RF, SiGe, MEMs and mixed-signal technologies by continuous development in these areas. A main component of our process development strategy is to acquire licenses for standard CMOS technologies and cell libraries from leading designers, such as ARM and Kilopass, and further develop specialized processes through our internal design teams. The licensing of these technologies has significantly reduced our internal development costs.

In connection with the separation of Jazz Semiconductor's business from Conexant in 2002, Conexant contributed to Jazz Semiconductor a substantial portion of its intellectual property, including software licenses, patents and intellectual property rights in know-how related to its business. Jazz agreed to license intellectual property rights relating to the intellectual property contributed to Jazz by Conexant back to Conexant and its affiliates. Conexant may use this license to have Conexant products produced by third-party manufacturers and to sell such products, subject to obtaining Jazz's prior consent.

Our ability to compete depends on our ability to operate without infringing upon the proprietary rights of others. The semiconductor industry is generally characterized by frequent litigation over patent and other intellectual property rights. As is the case with many companies in the semiconductor industry, we have from time to time received communications from third parties asserting that their patents cover certain of our technologies or alleging infringement of intellectual property rights. We expect that we will receive similar communications in the future. Irrespective of the validity or the successful assertion of such claims, we could incur significant costs and devote significant management resources in defending these claims, which could seriously harm us.

Design Services

To better serve our customers' design needs using advanced CMOS and mixed-signal processes, we have entered into a series of agreements with leading providers of physical design libraries, mixed-signal and non volatile memory design components. These components are basic design building blocks, such as standard cells, interface input-output (I/O) cells, software compilers for the generation of on-chip embedded memories arrays, mixed-signal and non-volatile memory design blocks. To achieve optimal performance, all of these components must be customized to work with our manufacturing process. These components are used in most of our customers' chip designs.

We interact closely with customers throughout the design development and prototyping process to assist them in the development of high performance and low power consumption semiconductor designs and to lower their final die, or individual semiconductor, costs through die size reductions and integration. We provide engineering support and services as well as manufacturing support in an effort to accelerate our customers' design and qualification process so that our customers can achieve faster time to market. We have entered into alliances with Cadence Design Systems, Inc., Synopsys, Inc., Mentor Graphics Corp., and other leading suppliers of electronic design automation tools, and also licensed standard cells, I\O and SRAM technologies from ARM and Synopsys, Inc., leading providers of physical intellectual property components for the design and manufacture of ICs. Through these relationships, we provide our customers with the ability to simulate the behavior of our processes in standard electronic design automation, or EDA, tools. To provide additional functionality in the design phase, we offer our customers standard and proprietary models within design kits that we have developed. These design kits, which collectively comprise our design library, and design platform, allow our customers to quickly simulate the performance of a semiconductor design with our processes, enabling them to refine their product design before actually manufacturing the semiconductor.

35

The applications for which our specialty process technologies are targeted present challenges that require an in-depth set of simulation models. We provide these models as an integral part of our design platform. At the initial design stage, our customers’ internal design teams use our proprietary design kits to design semiconductors that can be successfully and cost-effectively manufactured using our specialty process technologies. Our engineers, who typically have significant experience with analog and mixed-signal semiconductor design and production, work closely with our customers’ design teams to provide design advice and help them optimize their designs for our processes and their performance requirements. After the initial design phase, we provide our customers with a multi-project wafer service to facilitate the early and rapid use of our specialty process technologies, which allows them to gain early access to actual samples of their designs. Under this multi-project wafer service, we schedule a bimonthly multi-project wafer run in which we manufacture several customers’ designs in a single mask set, providing our customers with an opportunity to reduce the cost and time required to test their designs. We believe that our circuit design expertise and our ability to accelerate our customers’ design cycle while reducing their design costs represent one of our competitive strengths.

Our design center helps customers accelerate the design-to-silicon process and enhances first-time silicon success by providing them with the required design resources and capabilities. Our design services can assist in all or part of the design flow. Our in-depth knowledge of the fab and processes provide a substantive advantage when implementing designs that reach the boundaries of technology. In addition, our IP and engineering services can assist and relieve some of our customers' efforts, providing the specific skills and expertise critical for successful implementation of our customers’ design on our manufacturing process.

During 2011, we launched a Design Centers Partnership Incentive Program offered to independent design centers, known as Design Star Awards Program (DSAP). The reciprocal program enables TowerJazz to attain new customers and increase revenue from their design partners’ referrals. In turn, the design houses will receive incentives from TowerJazz for its products and services as well as referrals for new design customers, whereby they can benefit twice.

The program enlists qualified design partners specialized in our process that can facilitate design work for our customers to effectively manufacture their products at our facilities. It offers capabilities to design both complete ICs including assembly and test and, in addition, supports specific design stages in the chip development process.

C.ORGANIZATIONAL STRUCTURE

The legal name of our company is Tower Semiconductor Ltd. Tower was incorporated under the laws of the State of Israel in 1993. Tower directly operates our Fab 1 and Fab 2 operations in Israel. . Tower’s wholly-owned Jazz Technologies, Inc. subsidiary owns all the shares of Jazz Semiconductor, Inc. (both of which are incorporated under the laws of the State of Delaware) which operates our Fab 3 facility. TowerJazz Japan, Ltd. (incorporated in Japan) operates our Fab 4 facility in Japan.

D.PROPERTY, PLANTS AND EQUIPMENT

Manufacturing Facilities

We currently operate four manufacturing facilities—our Fab 1 and Fab 2 facilities in Israel, our Fab 3 Jazz facility in Newport Beach, California and our recently acquired Fab 4 in Japan. The capacity in each of our facilities at any particular time is variable and depends on the combination of the processes being used and the product mix being manufactured. Hence, it may be significantly lower at certain times as a result of certain of our combinations that may require more processing steps than others. We have the ability to rapidly change the mix of production processes in use in order to respond to changing customer needs and maximize utilization of the fab. In general, our ability to increase our manufacturing capacity has been achieved through the addition of equipment, improvement in equipment utilization, the reconfiguration and expansion of the existing clean room area and the construction of an additional clean room area.

Capital expenditures in 2011, 2010 and 2009 were approximately $132, $89 million, and $32 million, respectively.

Fab 1

We acquired our Fab 1 facility from National Semiconductor in 1993, which had operated the facility since 1986. The facility is located in Migdal Haemek, Israel. We occupy the facility pursuant to a long-term lease from the Israel Lands Authority that expires in 2032.

Due to the sensitivity and complexity of the semiconductor manufacturing process, a semiconductor manufacturing facility requires a special “clean room” in which most of the manufacturing functions are performed. Our Fab 1 facility includes an approximately 51,900 square foot clean room.

Since we commenced manufacturing at Fab 1, we increased its manufacturing capacity, using our 1.0 micron to 0.35-micron processes, including specialized processes. We estimate that our capacity in Fab 1 when fully utilized is approximately 20,000 150 mm wafer starts per month.

In May 2004, we entered into a long term foundry agreement with Siliconix Incorporated and Siliconix Technology C.V, an affiliate of Vishay-Technology Inc, to manufacture products at Fab 1 using process technology that Siliconix transferred to us. During recent years, the parties amended the agreement several times to revise the terms of the purchase of wafers, and transfer additional product platforms to Tower for the manufacturing of new products in Fab 1.

Fab 2

In 2003, we commenced production in our Fab 2, also located in Migdal Haemek, Israel. Fab 2 supports geometries ranging from 0.35 to 0.13-micron, using advanced CMOS technology, including CMOS image sensors, embedded flash, advanced analog, RF (radio frequency), power platforms and mixed-signal technologies.

The land on which Fab 2 is located is subject to a long-term lease from the Israel Lands Authority that expires in 2049.The overall clean room area in Fab 2 is approximately 100,000 square feet. Depending on the process technology and product mix, when fully ramped-up, we estimate that Fab 2 will be capable of achieving capacity levels of approximately 45,000 wafers per month.

Since 2000, we have invested significantly in the purchase of fixed assets, primarily in connection with the construction of Fab 2, technology advancement and capacity expansion.

37

Newport Beach

Fab 3

Jazz's headquarters and manufacturing facilities, which we refer to as Fab 3, are located in Newport Beach, California. The manufacturing facility comprises 320,000 square feet, including 120,000 square feet of overall clean room area. The headquarters space comprises 68,000 square feet of offices. Depending on the process technology and product mix, when fully utilized, it is capable of achieving capacity levels of approximately 22,000 wafers per month. Fab 3 supports geometries ranging from 0.80 to 0.13-micron.

Jazz leases the use of these facilities under non-cancellable operating leases that expire March 2017 and has a unilateral option to extend the terms of each of these leases for two consecutive five-year periods ending in 2027.

Fab 4

In June 2011, we acquired a fabrication facility in Nishiwaki City, Hyogo, Japan from Micron, which we refer to as Fab 4, and which is capable of manufacturing approximately 60,000 wafers per month, depending on the process technology and product mix. The assets and related business that we acquired from Micron are held and conducted through a wholly owned Japanese subsidiary, TowerJazz Japan Ltd. Fab 4 supports geometries ranging from 0.13 to 0.095-micron and can be used to manufacture products for Micro n and other products using TowerJazz process technologies.

ENVIRONMENTAL, SAFETY AND QUALITY MATTERS AND CERTIFICATIONS

We have placed significant emphasis on achieving and maintaining a high standard of manufacturing quality. All our facilities are ISO 9001 certified, an international quality standard that provides guidance to achieve an effective quality management system. In addition, all our facilities are TS16949 certified, a more stringent automotive quality standard (Fab 4 - TS 16949 certification is expected in August 2012).

For environmental, our operations are subject to a variety of laws and governmental regulations relating to the use, discharge and disposal of toxic or otherwise hazardous materials used in our production processes. Failure to comply with these laws and regulations could subject us to material costs and liabilities, including costs to clean up contamination caused by our operations. All our facilities are ISO 14000 certified, an international standard that provides management guidance to achieve an effective environmental management system. Risks have been evaluated and mitigation plans are in place to prevent and control accidental spills and discharges. Procedures have also been established at all our locations to ensure all accidental spills and discharges are properly addressed. The environmental management system assists in evaluating compliance status with all applicable environmental laws and regulations as well as establishing loss prevention and control measures. In addition, our facilities are subject to strict regulations and periodic monitoring by government agencies. With these systems, we believe we are currently in compliance in all material respects with applicable environmental laws and regulations.

For safety, all our facilities are OHSAS 18000 certified, an international occupational health and safety standard that provides guidance to achieve an effective health and safety management system. The health and safety standard management system assists in evaluating compliance status with all applicable health and safety laws and regulations as well as establishing preventative and control measures. We believe we are currently in compliance with all applicable health and safety laws and regulations.

Our goal in implementing OHSAS 18001, ISO 14001, ISO 9001 and TS16949 systems is to continually improve our environmental, health, safety and quality management.

ITEM 4A. UNRESOLVED STAFF COMMENTS

Not Applicable.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

A. OPERATING RESULTS

Management's Discussion and Analysis of Financial Condition and Results of Operations

The information contained in this section should be read in conjunction with our consolidated financial statements for the year ended December 31, 2011 and related notes and the information contained elsewhere in this annual report. Our financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("US GAAP").

Overview

We are the specialty foundry leader dedicated to the manufacture of semiconductors. Specialty foundries do not offer any products of their own, but focus on producing integrated circuits based on the design specifications of their customers. We manufacture semiconductors using advanced production processes for our customers primarily based on third party designs and our own proprietary designs. We currently offer the manufacture of ICs with geometries ranging from 1.0 to 0.095-micron.

In September 2008, we completed the merger of Jazz in a stock for stock transaction.

In June 2011 we acquired the fabrication facility in Nishiwaki City, Hyogo, Japan owned by a wholly-owned Japanese subsidiary of Micron. We are operating the facility through our wholly-owned Japanese subsidiary, TJP.

During the year ended December 31, 2011, we had four significant customers who contributed between 5% to 32% of our revenues. During the year ended December 31, 2010, we had five significant customers who contributed between 5% to 16% of our revenues. In 2009, we had three significant customers who contributed between 7% to 17% of our revenues.

The percentage of our sales from customers located outside the United States was 22%, 31% and 21% in the years ended December 31, 2011, 2010 and 2009, respectively. We believe that a substantial portion of our sales will continue to come from customers located outside the United States.

Critical Accounting Policies

Revenue Recognition.

Our net revenues are generated principally from sales of semiconductor wafers. We also derive revenues from engineering services and other support and consultancy services. The majority of our revenue is achieved through the efforts of our direct sales force.

In accordance with ASC Topic 605 "Revenue Recognition", we recognize revenues from sale of products when the following fundamental criteria are met: (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred or services have been rendered, (iii) the price to the customer is fixed or determinable; and (iv) collection of the resulting receivable is reasonably assured. These criteria are usually met at the time of product shipment. Revenues are recognized when the acceptance criteria are satisfied, based on performing electronic, functional and quality tests on the products prior to shipment. Such company testing reliably demonstrates that the products meet all of the specified criteria prior to formal customer acceptance; hence, collection of payment for services is reasonably assured.

Revenues for engineering and other services are recognized ratably over the contract term or as services are performed.

Advances received from customers towards future engineering services, product purchases and in some cases capacity reservation are deferred until services are rendered, products are shipped to the customer, or the capacity reservation period ends.

Revenue relating to a turn-key agreement with an Asian entity are recognized based on ASC 605-35 (formerly SOP 81-1 “Accounting for Performance of Construction Type and Certain Production Type Contracts”) using the percentage of completion method. Measurement of the percentage toward completion is determined, based on the ratio of actual labor hours incurred to total labor hours estimated to be incurred over the duration of the contract. Such measurement involves management's estimates and judgment and are based on a detailed project plan, our substantial experience in building a fab, transferring and implementing new technologies and sub-contractors' experts.

Our revenue recognition policy is significant because our revenues are a key component of our results of operations. We follow very specific and detailed guidelines in measuring revenue; however, an accrual for estimated sales returns and allowances relating to specific yield or quality commitments, which is computed primarily on the basis of historical experience and specific identification, is recorded. Any changes in assumptions for determining the accrual for returns and other factors affecting revenue recognition may affect mainly the timing of our revenue recognition and cause our operating results to vary from quarter to quarter. Changes in assumptions for determining the percentage toward completion for the turn-key agreement with the Asian entity may also affect the timing of our revenue recognition. Accordingly, our financial position and results of operations may be affected.

Depreciation and Amortization.

We are heavily capital oriented and the amount of depreciation is a significant amount of our yearly expenses. Changes to the useful lives assumption and hence the depreciation may have a material impact on our results of operations. Depreciation and amortization expenses in 2011 amounted to $163 million. Currently, we estimate that the expected economic life of our assets is as follows: (i) buildings (including facility infrastructure) –10 to 25 years; (ii) machinery and equipment, software and hardware – 3 to 7 years; and (iii) technology – 4 years to 9 years. Costs in relation to Fab 2 technologies are amortized over the expected estimated economic life of the technologies commonly used in the industry. The amortization phase commences on the date on which the technology is ready for its intended use. The amounts attributed to intangible assets as part of the purchase price allocations for the acquisitions of Jazz and TJP are amortized over the expected estimated economic lives of the intangible assets commonly used in the industry. Changes in our estimates regarding the expected economic life of our assets might affect our depreciation and amortization expenses.

Impairment of Fixed Assets and Intangible Assets.

Management reviews long-lived tangible assets and intangible assets on a periodic basis, as well as when such a review is required based upon relevant circumstances to determine whether events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. For those assets that have definite useful lives, recoverability tests are performed based on undiscounted expected cash flows. When the asset is not recoverable an impairment loss should be computed based on the difference between the carrying amount of the assets (or asset group) and the fair value. The fair value in most instances will be determined using present value techniques applied to expected cash flows. Changes in the assumptions used in forecasting future cash flows and the fair value of the assets may have significant effect on determining whether an impairment charge is required and hence may affect our results of operations.

40

Impairment of Goodwill.

Goodwill is subject to an impairment test on at least an annual basis or upon the occurrence of certain events or circumstances. Goodwill impairment is assessed based on a comparison of the fair value of the unit, to which the goodwill is ascribed and the underlying carrying value of its net assets, including goodwill. If the carrying amount of the unit exceeds its fair value, the implied fair value of the goodwill is compared with its carrying amount to measure the amount of impairment loss, if any. Changes in the assumptions used in calculation of the fair value of the unit may have a significant effect on determining whether an impairment charge is required and hence may affect our results of operations.

Convertible Debentures.

In accordance with ASC 470-20 “Debt with Conversion and Other Options", the proceeds from the sale of debt securities with a conversion feature and or other options are allocated to each security issued based on its relative fair value.

We are required, according to ASC Topic 815 "Derivatives and Hedging", to determine whether the conversion option embedded in the convertible debt should be bifurcated and accounted for separately. Such determination is based on whether on a standalone basis such conversion option would be classified as equity. If the option can be classified as equity, no bifurcation is required. The analysis required under ASC Topic 815 involves the consideration of many factors and assumptions. Any changes in those factors or assumptions may have a significant effect on determining whether embedded derivatives are required to be bifurcated and hence may affect our results of operations.

Income Taxes.

We account for income taxes in accordance with ASC 740, “Income Taxes”. This Topic prescribes the use of the liability method whereby deferred tax asset and liability account balances are determined based on differences between financial reporting and tax bases of assets and liabilities. Deferred taxes are computed based on the tax rates anticipated (under applicable law as of the balance sheet date) to be in effect when the deferred taxes are expected to be paid or realized.

We evaluate the realizability of our deferred tax assets for each jurisdiction in which we operate at each reporting date, and establish valuation allowances when it is more likely than not that all or a portion of our deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income of the same character and in the same jurisdiction. We consider all available positive and negative evidence in making this assessment, including, but not limited to, the scheduled reversal of deferred tax liabilities and projected future taxable income. In circumstances where there is sufficient negative evidence indicating that our deferred tax assets are not more-likely-than-not realizable, we establish a valuation allowance.

We use a two-step approach to recognizing and measuring uncertain tax positions. The first step is to evaluate tax positions taken or expected to be taken in a tax return by assessing whether they are more-likely-than-not sustainable, based solely on their technical merits, upon examination and including resolution of any related appeals or litigation process. The second step is to measure the associated tax benefit of each position as the largest amount that we believe is more-likely-than-not realizable. Differences between the amount of tax benefits taken or expected to be taken in our income tax returns and the amount of tax benefits recognized in our financial statements represent our unrecognized income tax benefits, which we either record as a liability or as a reduction of deferred tax assets. Our policy is to include interest and penalties related to unrecognized income tax benefits as a component of income tax expense.

Recently Issued Accounting Standards

ASU No. 2009-13 - Revenue Recognition (Topic 605): "Multiple-Deliverable Revenue Arrangements". This standard modifies the revenue recognition guidance for arrangements that involve the delivery of multiple elements, such as product, software, services and support, to a customer at different times as part of a single revenue generating transaction. This standard provides principles and application guidance to determine whether multiple deliverables exist, how the individual deliverables should be separated and how to allocate the revenue in the arrangement among those separate deliverables. The standard is effective for revenue arrangements entered into or modified in fiscal years beginning on or after June 15, 2010 with earlier adoption permitted. The Company adopted this standard in the beginning of the first quarter of 2011. The adoption of this update did not have a significant impact on the Company's consolidated financial statements.

In May 2011, the Financial Accounting Standards Board (FASB) issued amended standards to achieve a consistent definition of fair value and common requirements for measurement of and disclosure about fair value between U.S. GAAP and International Financial Reporting Standards. For assets and liabilities categorized as Level 3 and recognized at fair value, these amended standards require disclosure of quantitative information about unobservable inputs, a description of the valuation processes used by the entity, and a qualitative discussion about the sensitivity of the measurements. In addition, these amended standards require that we disclose the level in the fair value hierarchy for financial instruments disclosed at fair value but not recorded at fair value. These new standards are effective beginning in the first quarter of 2012; early adoption of these standards is prohibited. The Company does not expect these new standards to significantly impact its consolidated financial statements.

In June 2011, the FASB issued amended standards to increase the prominence of items reported in other comprehensive income. These amendments eliminate the option to present components of other comprehensive income as part of the statement of changes in stockholders' equity and require that all changes in stockholders' equity except investments by, and distributions to, owners be presented either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In addition, these amendments require that we present on the face of the financial statements reclassification adjustments for items that are reclassified from other comprehensive income to net income in the statements where the components of net income and the components of other comprehensive income are presented. These new standards are effective beginning in the first quarter of 2012 and are to be applied retrospectively. These amended standards will impact the presentation of other comprehensive income but will not impact the Company's financial position or results of operations

In September 2011, the FASB issued amended standards to simplify how entities test goodwill for impairment. These amended standards permit an assessment of qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit in which goodwill resides is less than its carrying value. For reporting units in which this assessment concludes it is more likely than not that the fair value is more than its carrying value, these amended standards eliminate the requirement to perform further goodwill impairment testing as outlined in the previously issued standards. These amended standards are effective beginning in the first quarter of 2012. The Company does not expect these new standards to significantly impact its consolidated financial statements.

Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the financial statements and the related notes thereto included in this annual report. The following table sets forth certain statement of operations data as a percentage of total revenues for the years indicated. The results for 2009, 2010 and 2011 all include Jazz's results. Our consolidated financial statements include TJP results as from June 3, 2011.

	Year Ended December 31,					
	2011		2010		2009	
Statement of Operations Data:						
Revenues	100	%	100	%	100.0	%
Cost of revenues	86.1		79.0		108.9	
Gross profit (loss)	13.9		21.0		(8.9	)
Research and development expenses, net	4.1		4.7		7.8	
Marketing, general and administrative expenses	7.9		7.8		10.7	
Acquisition related costs	0.2		0.0		--	
Operating profit (loss)	1.7		8.5		(27.4	)
Financing expense, net	(6.6	)	(14.3	)	(15.3	)
Gain on acquisition	3.2		--		--	
Other income, net	2.2		--		0.7	
Income tax benefit (expense)	(3.5	)	(2.5	)	1.7	
Loss	(3.0	)%	(8.3	)%	(40.3	)%

Year Ended December 31, 2011 compared to Year Ended December 31, 2010

Revenue. Revenues for the year ended December 31, 2011 were $611.0 million compared to $509.3 million for the year ended December 31, 2010. Such increase in revenues was primarily a result of higher wafers shipped of 32% (mainly resulting from the inclusion during 2011 of shipments from Fab 4, partially offset by lower shipments from our other fabs due to the weakening customer demand in the semiconductor industry), while the average selling price decreased by 4%.

Revenues for the year ended December 31, 2010 included $27 million higher revenues, as compared to the year ended December 31, 2011, relating to the agreement with the Asian entity, as detailed in Notes 2K and 16D(2) to the annual consolidated financial statements for the year ended December 31, 2011 included in this report. The project with the Asian entity is expected to be finalized in the coming year and we expect 2012 revenues from this project to be approximately $25 million lower than in 2011.

Cost of Total Revenues. Cost of revenues for the year ended December 31, 2011 amounted to $526.2 million, as compared to $402.1 million for the year ended December 31, 2010. The increase in cost of revenues is mainly due to including 2011 TJP's cost of revenue. Cost of revenues for the year ended December 31, 2011 included one-time depreciation expenses reduction resulting from the grants approval by the Investment Centre, see Note 7B to the consolidated financial statements for the year ended December 31, 2011 included in this report, as well as a reduction of $17 million from the Asian project referred to above.

Gross Profit . Gross profit for the year ended December 31, 2011 was $84.8 million, as compared to $107.2 million for the year ended December 31, 2010, a decrease of $22.4 million, resulting from the above described $124.1 million increase in cost of revenues offset by the above described $101.7 million revenue increase. Gross profit for the year ended December 31, 2011 decreased following the weakening customer demand in the semiconductor industry which affected our Israeli and US fabs and was offset by the inclusion of 2011 TJP's gross profit.

Research and Development. Research and development expenses for the year ended December 31, 2011 amounted to $24.9 million, substantially the same as the $23.9 million for the year ended December 31, 2010.

Marketing, General and Administrative Expenses. Marketing, general and administrative expenses for the year ended December 31, 2011 amounted to $48.2 million as compared to $40.0 million for the year ended December 31, 2010. The increase is mainly due to including 2011 TJP's Marketing, general and administrative expenses. As a percentage of revenues, marketing, general and administrative expenses remained at approximately 8% of revenues.

Operating Profit. Operating profit for the year ended December 31, 2011 was $10.2 million, as compared to $43.3 million for the year ended December 31, 2010, a decrease of $33.1 million, resulting mainly from the above described decrease of $22.4 in gross profit, the above described $1.0 million research & development expenses increase and the above described $8.2 million marketing, general and administrative expenses increase.

Financing Expenses, Net. Financing expenses, net for the year ended December 31, 2011 were $40.3 million compared to financing expenses, net of $72.9 million for the year ended December 31, 2010. The decrease in financing expenses, net is described in details in Note 19 to the consolidated financial statements as of December 31, 2011 included in this report.

Gain from acquisition. Gain from acquisition of TJP was $19.5 million gross, as detailed in Note 3 to the consolidated financial statements as of December 31, 2011 included in this report. Loss for the year ended December 31, 2011 included approximately $10 million net positive effect from Nishiwaki Fab acquisition, comprised of (i) approximately $19.5 million gross gain from the acquisition, as the fair market value of the assets, net acquired exceeded the purchase price and (ii) approximately $9.5 million of related tax provisions and other expenses directly associated with this acquisition.

Other income, Net. Other income, net for the year ended December 31, 2011 includes approximately $15 million gross gain from the sale of our 10% holdings in HHNEC.

Income Tax expense. Income tax expense resulting from the subsidiaries' income before taxes, amounted to $21.4 million in the year ended December 31, 2011 as compared to $12.8 million for the year ended December 31, 2010. Income tax expense in the year ended December 31, 2011 resulted from our subsidiaries' operating income and the approximately $8 million income tax expenses relating to the gain from the acquisition of TJP.

Loss. Loss for the year ended December 31, 2011 was $18.5 million as compared to $42.4 million for the year ended December 31, 2010. Such $23.9 million improvement is due to the $32.6 million lower financing expenses, $19.5 million gross gain from the acquisition of TJP and $13.4 million other income which were partially offset by the lower operating profit of $33.1 million and $8.5 million higher tax expenses.

Year Ended December 31, 2010 compared to Year Ended December 31, 2009

Revenue. Revenue for the year ended December 31, 2010 amounted to $509.3 million compared to $298.8 million for the year ended December 31, 2009. The 70% increase in revenues was mainly due to the higher utilization in our fabrication facilities due to improved market conditions and increased demand for our specialty products and our specific product offering, which resulted in higher wafers shipped of 66%, while the average selling price decreased by 4%.

Revenues for the year ended December 31, 2010 included $63 million higher revenues, as compared to the year ended December 31, 2009, relating to the agreement with the Asian entity, as detailed in Note 15D to the annual consolidated financial statements for the year ended December 31, 2010.

Cost of Total Revenues. Cost of revenues for the year ended December 31, 2010 amounted to $402.1 million, as compared to $325.3 million for the year ended December 31, 2009. Our increase in cost of revenues of 24% is lower than the 70% revenues increase primarily due to the higher utilization of the manufacturing facilities and continuing efforts of the cost reduction plan executed by the Company and synergies captured through the integration of Jazz.

Gross Profit (Loss). Gross profit for the year ended December 31, 2010 was $107.2 million compared to a gross loss of $26.5 million for the year ended December 31 2009. We achieved such gross profit due to the increased products' shipments and higher utilization in our fabrication facilities due to improved market conditions and increased demand for our specialty products and our specific product offering and cost saving efforts described above.

Research and Development. Research and development expenses for the year ended December 31, 2010 amounted to $23.9 million, substantially the same as the $23.4 million for the year ended December 31, 2009.

Marketing, General and Administrative Expenses. Marketing, general and administrative expenses for the year ended December 31, 2010 amounted to $40.0 million as compared to $31.9 million for the year ended December 31, 2009. Marketing, general and administrative expenses increased mainly due to higher sales commissions and sales related expenses associated with the revenue increase as well as stock based compensation in regard to option grants. However, as a percentage of revenues, marketing, general and administrative expenses decreased to 7.9% for the year ended December 31, 2010 as compared to 10.7% for the year ended December 31, 2009.

Operating Profit (Loss). Operating profit for the year ended December 31, 2010 was $43.3 million, compared to operating loss of $81.8 million for the year ended December 31, 2009. Such $125.1 million improvement is mainly due to the higher gross profit partially offset by the higher operating expenses, as detailed above.

Financing Expense, Net. Financing expenses, net for the year ended December 31, 2010 were $72.9 million compared to financing expenses, net of $45.7 million for the year ended December 31, 2009. Such increase was mainly due to increases in the fair value of a portion of our liabilities which are presented at fair value under GAAP.

Income Tax Benefit (Expense). Income tax expenses resulting from Jazz's net income, amounted to $12.8 million in the year ended December 31, 2010 as compared to income tax benefit of $5.0 million for the year ended December 31, 2009. The increase in income tax expenses is due to the increase in Jazz's operating income in the year ended December 31, 2010.

Loss. Loss for the year ended December 31, 2010 was $42.4 million as compared to $120.5 million for the year ended December 31, 2009. Such $78.1 million improvement is due to the $125.1 million improvement in operating profit, which was partially offset mainly by the $27.2 million increase in financing expenses and $17.9 million increase in tax expenses.

Impact of Inflation and Currency Fluctuations

The US Dollar costs of our operations in Israel are influenced by changes in the rate of inflation in Israel and the extent to which such changes are not offset by the change in valuation of the NIS in relation to the US Dollar. During the year ended December 31, 2011, the exchange rate of the US Dollar in relation to the NIS increased by 7.7% and the Israeli Consumer Price Index ("CPI") increased by 2.2% (during the year ended December 31, 2010 there was a decrease of 6.0% in the exchange rate of the US Dollar in relation to the NIS and an increase of 2.7% in the CPI).

We believe that the rate of inflation in Israel did not have a material effect on our business to date. However, our US Dollar costs will increase if inflation in Israel exceeds the devaluation of the NIS against the US Dollar.

The US Dollar costs of our operations in Japan are influenced by the changes in valuation of the Japanese Yen ("JPY") in relation to the US Dollar. From June 2011, the date we acquired TJP, to December 31, 2011, the exchange rate of the US Dollar in relation to the JPY decreased by 3.8%.

Nearly all cash generated from our operations and from our financing and investing activities is denominated in US Dollars, JPY and NIS. Our expenses and costs are denominated in NIS, US Dollars, JPY and Euros. We are, therefore, exposed to the risk of currency exchange rate fluctuations.

Tower's and Jazz's bank loans mainly provide for interest based on a floating LIBOR rate, and we are therefore exposed to interest rate fluctuations. From time to time, we engage in various hedging strategies to reduce our exposure to some, but not all, of these risks and intend to continue to do so in the future. However, despite any such hedging activity, we are likely to remain exposed to interest rate fluctuations, which may increase the cost of our business activities, particularly our financing expenses.

Part of Tower's debentures are denominated in NIS and linked to the Israeli CPI and therefore we are exposed to fluctuation of the NIS/US Dollar exchange rate. The US Dollar amount of our financing costs (interest and currency adjustments) related to these debentures will increase if the rate of inflation in Israel is not offset by the devaluation of the NIS in relation to the US Dollar. In addition, the US Dollar amount of any repayment on account of the principal of these debentures will also increase.

The quantitative and qualitative disclosures about market risk are in Item 11 of this annual report.

B. LIQUIDITY AND CAPITAL RESOURCES

As of December 31, 2011, we had an aggregate amount of $101.1 million in cash and cash equivalents as compared to $198.4 million of cash, cash equivalents and interest bearing deposits, including designated deposits as of December 31, 2010.

During the year ended December 31, 2011, we generated an amount of $108.0 million from operating activities, received proceeds from the sale of the investment in HHNEC in the amount of $31.4 million, net, and raised $22.6 million on account of shareholders' equity (for further details see also Notes 6 and 17H to the consolidated financial statements as of December 31, 2011 included in this report). These liquidity resources financed mainly the capital investments, net of investment center grants we made during the year ended December 31, 2011, which aggregated to approximately $78 million, the repayment of debt in the amount of $141.2 million and the $40 million cash paid to Micron Technologies for the acquisition of TJP.

As of December 31, 2011, loans from banks were presented in our balance sheet in the amount of $109.1 million, of which $5.3 million are presented as short-term. As of such date, we presented an aggregate of $240.7 million of debentures on our balance sheet, of which $42.9 million are presented as short-term. During the past two years, the Company experienced business and financial improvement, as reflected by the improvement in the Company's revenue and margins as compared to the period prior to mid-2009 which was negatively affected by the global economic downturn that commenced in 2008. However, following the recent economic slowdown in Europe and worldwide and following the conditions in the financial markets, the semiconductor industry experienced weakening customer demand and reduced rate of growth. Market analysts are currently cautious in regards to the global economic conditions forecasted 2012 and beyond, and there can be no assurance that the global economic conditions will not negatively affect the Company's business and financial position. There is no assurance that another downturn in the semiconductor industry and/or in the global economy will not occur. The effects of another downturn in the semiconductor industry and/or in the global economy may include global decreased demand, downward price pressure, excess inventory and unutilized capacity worldwide, which may negatively impact consumer and customer demand for the Company's products and the end products of the Company's customers. A downturn in the semiconductor industry and/or in the global economy may adversely affect the Company's commercial relationships with its customers, suppliers, and creditors, including its lenders, its plans to continue its capacity growth, and the Company's future financial results and position, including its ability to raise funds in the capital markets and to fulfill its debt obligations and other liabilities, comprised mainly of banks' loans and debentures.

The Company is exploring various ways to fund its capacity growth plans and the ramp-up of its business technology capabilities and manufacturing capacity, including, of its newly acquired fab in Japan and fulfill its debt obligations and other liabilities, however there is no assurance when, if at all, such funding will be available to the Company. Such funding is including, among others, debt restructuring and/or refinancing, possible financing transactions sale of assets, intellectual property licensing, possible sale and lease-back of real estate assets and improving cash flow from operations thorough operating efficiencies.

For implications on our operations if we do not generate increased levels of cash from operations and/or do not raise additional funding and if we will not be in compliance with the repayment schedule under the amended facility agreement and are unsuccessful in negotiating a revised repayment schedule, see "Risk Factors - Risks Affecting Our Business".

Fab 2 Agreements

For information regarding agreements with Israel Corp., our banks and others see Notes 12B and 16 to the 2011 annual consolidated financial statements.

We have registered liens in favor of the State of Israel and our banks on substantially all of our present and future assets, including Fab 1 and Fab 2.

Tower's Credit Facility

As of December 31, 2011, Tower's outstanding debt under its credit facility with Bank Leumi and Bank Hapoalim (the: "Israeli Banks") was approximately $131 million, which carries interest at a rate of three-month USD LIBOR plus 2.75% per annum.

Agreements and Amendments

In September 2008, Tower signed and closed definitive agreements with the Israeli Banks and Israel Corp. Pursuant to the agreements: (i) $200 million of Tower's debt to the banks was converted into equity equivalent capital notes convertible into 140.8 million Tower ordinary shares, (ii) the commencement date for the repayment of the remaining principal of the Israeli Banks' loans was postponed from September 2009 to September 2010 (which was further revised in the amendments described below); (iii) $50 million of debt owed by Tower to Israel Corp. was converted into equity equivalent capital notes convertible for 35.2 million of Tower's ordinary shares; and (iv) Israel Corp. invested $20 million in Tower in exchange for equity equivalent capital notes convertible into approximately 28.2 million Tower's ordinary shares.

In connection with the restructuring, Israel Corp. committed to invest up to an additional $20 million under certain conditions. In January 2009, such conditions were satisfied and Israel Corp. invested said amount in exchange for approximately equity equivalent capital notes of Tower convertible into 76.9 million ordinary shares Tower.

During 2009, the Israeli Banks and Tower entered into an amendment to the Facility Agreement to: (i) postpone the repayment schedule of the outstanding loans, to provide for repayment in 8 equal quarterly installments from September 2011 until June 2013 (which was further revised in the amendment described below); (ii) waive the financial covenants stipulated in the Facility Agreement through December 31, 2009; and (iii) provide for the payment by Tower upon certain circumstances, as stipulated in the amendment, and following receipt by Tower of significant amounts of proceeds from a certain source, of a portion of such proceeds on account of the outstanding loans prior to the due date specified above. As part of the terms of the amendment, Tower agreed to grant the Israeli Banks new warrants in three annual tranches with an aggregate exercise price of $1 million each, at a quantity and price to be calculated based on the market stock price prior to any such grant and pay the Israeli Banks fees in the aggregate amount of $0.4 million. As of December 31, 2011 all such warrants had been granted.

During 2010, Tower signed and closed definitive agreements with the Israeli Banks. Pursuant to the agreements: (1) Tower pre-paid a total of approximately $50 million of its loans; (2) the commencement date for the repayment of the remaining principal of the Israeli Banks' loans, was extended to ten quarterly installments between September 2013 and December 2015; (3) the interest rate on the remaining principal of the Israeli Bank's loans was set to be USD LIBOR plus 2.75% per annum; (4) the Israeli Banks consented to the issuance by Tower of additional long-term notes, which issuance was made by Tower in October 2010, (5) upon certain circumstances stipulated in the Banks' agreements, including following receipt by Tower of significant amounts of proceeds from certain sources, Tower agreed to early repayment of a certain amount of the outstanding loans ; (6) all warrants granted to the Israeli Banks were extended to December 2015; (7) Tower agreed to pay fees to the Israeli Banks; and (8) Tower agreed to place the net proceeds of the bond issuance in short-term pledged deposits for the purpose of securing future debt payments, which were presented in the balance sheet as designated deposits.

In February 2011, Tower issued approximately 8.5 million shares to the Israeli Banks in connection with its obligation under an amendment dated September 2006. As of December 31, 2011, Tower was in full compliance with all of the covenants under the amended facility agreement, as amended to date.

In February 2011, Tower entered into a letter agreement with the Israeli Banks pursuant to which the Israeli Banks gave their consent for the acquisition of Micron's fabrication facility in Japan, (including the cash investment associated with it). In addition, Tower agreed to designate $50 million in secured deposits until December 2011 for the purpose of debt payments, including $30 million prepayments made to the Banks towards its loans. As of December 31, 2011, Tower repaid such amounts and none of its cash is designated in any secured deposits following such payments made.

Compliance with Financial Ratios and Covenants.

Under the terms of its amended facility agreement, Tower must meet certain financial ratios, including mainly financial covenants relating to quarterly sales and quarterly EBITDA (earnings excluding interest, taxes, depreciation and amortization). Under the terms of the amended facility agreement, satisfying these financial ratios and covenants is a material provision.

As of December 31, 2011, Tower was in full compliance with all of the covenants under the amended facility agreement.

48

The amended facility agreement provides that if, as a result of any default, the banks were to accelerate Tower's obligations, Tower would be obligated, among other matters, to immediately repay all loans made by the banks (which as of March 31, 2012 amounted to approximately $131 million) plus penalties, and the banks would be entitled to exercise the remedies available to them under the amended facility agreement, including enforcement of their liens against all of Tower's assets.

Under the terms of the amended facility agreement, (i) there are limitations on changes of ownership which generally require that, TIC hold a minimum of approximately 48 million of our ordinary shares (including shares issuable upon conversion of our equity equivalent capital notes), and (ii) TIC and our largest wafer partners nominate a majority of our board of directors, subject to exceptions; and (iii) additional conditions and covenants, including restrictions on incurring debt and a prohibition on the distribution of dividends.

All issued equity equivalent capital notes described in this report and in the consolidated financial statements included in this report have no voting rights, no maturity date, no dividend rights, are not tradable, are not registered, do not carry interest, are not linked to any index and are not redeemable. In 2007, at the request of the Banks and Israel Corp. (the holders of the equity equivalent capital notes) pursuant to their right to request registration, the Company filed a registration statement with the SEC on Form F-3 for the registration of the shares underlying the capital notes. The SEC, among other comments, required that the Banks and Israel Corp be named as underwriters for purposes of this registration statement. The Banks and Israel Corp. did not agree to be named as underwriters and in 2008 asked the Company to withdraw the registration statement. The shares underlying the equity equivalent capital notes remain unregistered under the US Securities Act of 1933. The equity equivalent capital notes are classified in shareholders' equity.

Investment Center Grants

In February 2011, we received an official approval certificate ("ktav ishur") from the Israeli Investment Center, a governmental agency, for our expansion program according to which we received approximately $33 million as of December 31, 2011. Under our previous approved program approved in December 2000, we received an additional $165 million of grants for capital expenditure investment made during the years 2001 through 2005.

Entitlement to the above grants is subject to various conditions stipulated by the criteria set forth in the certificate of approval issued by the Israeli Investment Center, as well as by the Israeli Law for the Encouragement of Capital Investments - 1959 ("Investments Law") and the regulations promulgated thereunder. In the event Tower fails to comply with such conditions, Tower may be required to repay all or a portion of the grants received plus interest and certain inflation adjustments. In order to secure fulfillment of the conditions related to the receipt of investment grants, floating liens were registered in favor of the State of Israel on substantially all of Tower's assets

For information in regards to previous grants programs, see Note 7B to the 2011 annual consolidated financial statements included in this report.

Other Recent Financing Transactions

February 2012 fund raising

In February 2012, Tower raised approximately $80 million through the expansion of its long-term outstanding debentures Series F. The debentures are US dollar linked, are due in two equal installments in December 2015 and December 2016 and carry an interest rate of 7.8% per annum. The debentures Series F will be convertible into Tower's ordinary shares during the period commencing in September 2012 and ending in December 2016, with a conversion price that shall be equal to 120% of the average trading price of Tower's ordinary shares on the Tel-Aviv Stock Exchange during the 15 trading days before September 18, 2012, provided that in no event will the price be more than NIS 6.5, and not less than NIS 1.0. In addition, Tower Issued 26.6 million warrants exercisable from March 2, 2014 until March 1, 2016 at an exercise price to be determined in February 2014 and shall equal to 120% of the average trading price of Tower's ordinary shares on the Tel-Aviv Stock Exchange during the 15 trading days before February 20, 2014, provided that in no event will the price be more than NIS 4.25, and not less than NIS 2.0 linked to the US dollar.

Standby Equity Purchase Agreement

In August 2009, Tower entered into a definitive agreement with YA Global Master SPV Ltd. ("Yorkville"), according to which Yorkville committed to invest in Tower, upon Tower's request, up to $25 million by way of a stand-by equity-line, in consideration for ordinary shares of Tower to be issued at a 3% discount on the market price of the ordinary shares as determined in accordance with the agreement. This agreement has been amended several times (with the last amendment in November 2010) to increase the maximum amount which Yorkville is committed to invest at Tower's request, to a current aggregate of $95 million and to reduce the discount on market price at which the shares are issued to 2%. During 2011, Yorkville invested in Tower an aggregate total of $20 million for the issuance of approximately 16 million ordinary shares. As of December 31, 2011 $7 million was available for drawdown by Tower. No warrants or any debt or derivative instruments were issued by Tower under Yorkville agreement.

Universal Registration Statement on Form F-3

In September 2010, Tower filed a shelf registration statement on Form F-3 with the U.S. Securities and Exchange Commission, registering the possible offer and sale from time to time of up to $50 million of securities which Tower may elect to offer and sell during the three years following the effective date of the registration statement. The registration form was declared effective in September 2010. As of December 31, 2011, $22 million was available for future utilization.

Tower Israeli Shelf

In September 2010, Tower filed a shelf registration statement in Israel with the Israeli Securities Authority, registering the possible offer and sale from time to time of ordinary shares, debentures, convertible debentures, commercial paper, warrants to purchase shares, or warrants to purchase debentures. Securities sold pursuant to the shelf registration may only be sold in Israel and not to a person in the United States or to U.S. persons as defined in Regulation S. The shelf was declared effective in September 2010. The debentures series F described below and above, as well as the warrants issued together with such series F issuance described above under "February 2012 fund raising", were issued utilizing the securities available for registration under this shelf.

Tower Debentures

In October 2010, Tower raised an aggregate principal amount of approximately $100 million through the issuance of long-term debentures (“Series F Debentures”), due in two equal installments in December 2015 and December 2016. The Series F Debentures are fully linked to the US dollar, carry an interest rate of 7.8 percent per annum, and will be convertible into Tower's ordinary shares during the period commencing in September 2012 and ending in December 2016, with a conversion price that shall be equal to 120% of the average trading price of Tower’s ordinary shares on the Tel-Aviv Stock Exchange during the 15 trading days before September 18, 2012, provided that in no event will the price be more than NIS 6.5, and not less than NIS 1.0. All these amounts, although denominated in NIS are fully linked to the US dollar, including exercise prices discussed above.

For more information regarding these debentures see Note 13 to the 2011 annual Consolidated Financial Statements included in this report.

As detailed above, in February 2012, Tower expanded its Series F Debentures and raised approximately $80 million.

In December 2011, Tower fully paid the outstanding amount of its convertible debentures series C and as such debentures series C were fully redeemed.

In January 2012, Tower fully paid and redeemed its convertible debentures series B.

Jazz Loan Facility

In September 19, 2008, Jazz entered into a loan and security agreement, with Wachovia Bank (now Wells Fargo) for a three-year secured asset-based revolving credit facility (the "Loan Agreement").

In June 2010, Jazz entered into an amendment to the Loan Agreement, pursuant to which, the maturity date of the revolving credit facility was extended to September 2014, with available credit under the facility of up to $45 million. Jazz’s borrowing availability varies from time to time based on the levels of Jazz's accounts receivable, eligible equipment and other terms and conditions described in the loan agreement.

Loans under the facility will bear interest at a rate equal to, at Jazz’s option, either the lender’s prime rate plus a margin ranging from 0.50% to 1.0% or the LIBOR rate (as defined in the Loan Agreement) plus a margin ranging from 2.25% to 2.75% per annum.

The loan agreement contains customary covenants and other terms, including covenants based on Jazz’s EBITDA, as well as customary events of default. The facility is secured by the assets of Jazz. If any event of default occurs, Wachovia may declare due immediately, all borrowings under the facility and foreclose on the collateral. Furthermore, an event of default under the loan agreement would result in an increase in the interest rate on any amounts outstanding. As of December 31, 2011, Jazz was in compliance with all of the covenants under this Loan Agreement.

Borrowing availability under the facility as of December 31, 2011, was $7.1 million. Outstanding borrowings were $15.3 million and $1.3 million of the facility was supporting outstanding letters of credits on that date. Jazz considers outstanding borrowings of $10 million to be long-term debt as of December 31, 2011.

Jazz’s debt and obligations, including its obligations pursuant to the Loan Agreement, are not guaranteed by Tower.

Jazz Notes

In July 2010, Jazz (together with its U.S. subsidiaries) and Tower, entered into an exchange agreement (the "Exchange Agreement") with certain note holders (the "Participating Holders") holding approximately $80 million principal amount of Jazz's convertible Notes issued in 2006 which bore interest at a rate of 8% per annum payable semi-annually and were scheduled to mature in December 2011 ("Old Notes") .In October 2011, Jazz completed a voluntary transaction to early redeem the entire remaining outstanding amount of the Old Notes.

Under the Exchange Agreement, the Participating Holders exchanged their Old Notes for newly-issued 8% non-convertible notes of Jazz due June 2015 (the "New Notes") according to an exchange ratio of 1.175 New Notes for each 1.000 Old Notes. Interest on the New Notes is payable semiannually on June 30 and December 31 of each year. In addition, the Participating Holders received warrants to purchase approximately 25.3 million ordinary shares of Tower at an exercise price of $1.70 per share ("Warrants J").

The New Notes constitute unsecured obligations of Jazz, rank on parity in right of payment with all other indebtedness of Jazz, are effectively subordinated to all secured indebtedness of Jazz to the extent of the value of the collateral securing such indebtedness and are not guaranteed by Tower.

Jazz's obligations under the New Notes are guaranteed by Jazz's wholly owned domestic subsidiaries. Jazz has not provided condensed consolidated financial information for such subsidiaries because Jazz has no independent assets or operations, the subsidiary guarantees are full and unconditional and joint and several and subsidiaries of Jazz other than the subsidiary guarantors are minor. Other than the restrictions in the Loan Agreement, there are no significant restrictions on the ability of Jazz and its subsidiaries to obtain funds from their subsidiaries by loan or dividend.

Sale of the holdings in HHSL

As of December 31, 2010 Jazz had an investment in Hua Hong Semiconductor Ltd ("HHSL"), which owns 100% of Shanghai Hua Hong NEC Electronics Company Ltd (also known as "HHNEC"). The investment represented a minority interest of approximately 10% in HHSL, hence the investment in HHSL was recorded at fair value as of the date of Tower's merger with Jazz and subsequently carried using the cost method of accounting for investments, as Jazz did not have the ability to exercise significant influence.

During 2011, Jazz sold its 10% holdings in "HHSL", in an HHSL buyback transaction for gross amount of approximately $32 million in cash, before tax and other payments and recorded a gross gain of approximately $15 million from this transaction.

Income taxes

In February 2012, the U.S. tax authorities commenced an audit of Jazz's 2009 and 2010 tax returns, and asked Jazz for certain reports and data in connection with said years' tax returns. There is no indication to date regarding that Jazz will be required to pay any additional taxes pursuant to said audit.

Acquisition of TJP

The fair value of the consideration the Company paid for TJP was $62.6 million, of which $40 million was paid in cash and $22.6 million was paid through the issuance to Micron of approximately 19.7 million ordinary shares of Tower. The costs incurred in connection with the acquisition were $1.5 million and are included in operating expenses.

The purchase price has been allocated on the basis of the estimated fair value of the assets purchased and the liabilities assumed. The estimated fair value of the assets, net amounted to $82 million. As the purchase price was less than the fair value of net assets, the Company recognized a gross gain on the acquisition of $19.5 million.

Net profit for the year ended December 31, 2011 includes approximately $10.1 million net positive effect from the acquisition, comprised of (i) approximately $19.5 million gross gain from the acquisition, and (ii) approximately $9.4 million of related tax provisions and other expenses directly associated with this acquisition.

The Company believes that the lower than fair asset value paid by for TJP and the resultant gain realized from the acquisition derived from (i) declining forecast and weakening demand for products currently manufactured by TJP, (ii) the fact that an acquisition of a fab as a whole is less costly than acquiring each fab component separately, (iii) limited opportunities to sell a fab while maintaining the employment level, and (iv) the natural disasters in Japan which occurred in March 2011.

The allocation of fair value to the assets acquired and liabilities assumed is as follows (in thousands):

	As of June 3, 2011
Current assets	$25,783
Property, plant, and equipment, including real estate	145,559
Intangible assets	11,156
Other assets	2,900
Total assets as of acquisition date	185,398
Current liabilities	28,317
Long-term liabilities (mainly employees related termination benefits)	74,984
Total liabilities as of acquisition date	103,301
Net assets as of acquisition date	$82,097

The fair values set forth above are based on a valuation of TJP assets and liabilities performed by third party professional valuation experts hired to appraise the fair value of the assets in accordance with ASC 805-“Business Combinations”.

In addition, as part of said acquisition, TJP entered into a supply agreement with Micron. In accordance with this agreement, TJP will manufacture products for Micron at the Nishiwaki facility for at least three years with process technologies licensed from Micron under a technology licensing agreement signed between the companies at the closing of the acquisition. Under the supply agreement Micron is committed to purchase certain minimum volumes, with periodic downward scaling of quantities, until the end of the second quarter of 2014. The companies also agreed to provide each other with transition services required for the duration of the transition period of approximately two to three years.

In order to ensure continued supply of wafers to Micron, Tower and Micron also executed a credit support agreement pursuant to which Tower and TJP, are subject to certain covenants and other protections until June 2013.

Tower's ordinary shares issued to Micron are subject to lock-up arrangement with releases of 25% of the shares every six months ending on June 2013.

For further details regarding the acquisition of TJP, see Note 3 to the annual consolidated financial statements for the year ended December 31, 2011.

C. RESEARCH AND DEVELOPMENT, PATENTS AND LICENSES

Our research and development activities have related primarily to our process development and have been sponsored and funded by us with some participation by the Israeli government. Our research and development expenses for the years ended December 31, 2011, 2010 and 2009 were $24.9 million, $23.9 million and $23.4 million net of government participation of $2.4 million, $2.7 million and $2.0 million respectively. Tower also incurred costs in connection with the transfer of technology for use in Fab 2, some of which has been amortized over the estimated economic life of the technology following the commencement of production in Fab 2 during the third quarter of 2003 (see also in this Item "Critical Accounting Policies – Depreciation and Amortization").

For a description of our research & development policies and our patents and licenses, see "Item 4. Information on the Company-4.B. Business Overview".

D. TREND INFORMATION

The semiconductor industry has historically been highly cyclical on a seasonal and long-term basis. The worldwide economic downturn that commenced in 2008 and its effect on the semiconductor industry resulted in global decreased demand, downward price pressure, excess inventory and unutilized capacity worldwide. From the second half of 2009 through the end of 2011, the semiconductor industry had experienced accelerated growth rates and recovered to high utilization rates in similar levels to the period before the above described 2008 downturn. Currently market analysts are cautious in regards to the global economic conditions forecasted for the second half of 2012 and beyond, and there can be no assurance that another downturn in the semiconductor industry and/or in the global economy will not occur.

On a long-term basis, the market fluctuates, cycling through periods of weak demand, production excess capacity, excess inventory and lower sales prices and periods of strong demand, full capacity utilization, product shortages and higher sales prices.

There is a trend within the semiconductor industry toward ever-smaller features and ever-growing wafer sizes. State-of-the-art fabs are currently using process geometries of 90-nanometer and below and wafer sizes of 300-mm. As demand for smaller geometries increases, there is downward pressure on the pricing of larger geometry products and increasing underutilization of fabs that are limited to manufacturing larger geometry products, which results in less profitability for manufacturers of larger geometry products. However, our strategy to focus on specialty technologies within the nodes we have enables us to achieve higher product selling prices as compared to the manufacture of plain vanilla platform products such as other manufacturers in the industry. The Company currently offers process geometries of 0.35, 0.50, 0.55, 0.60, 0.80-micron and above on 150-mm wafers and 0.35, 0.18. 0.16, 0.13, 0.11 and 0.095-micron on 200-mm wafers.

In 2010 and 2011, we accelerated our plans for additional capacity expansion to meet customer demand and significantly increased our capacity in Fab 1, Fab2 and Fab3 to the levels noted in ITEM 4A and acquired Fab 4 to add more capacity in a different geographic region.

E. OFF-BALANCE SHEET ARRANGEMENTS

We are not a party to any material off-balance sheet arrangements except for the purchase commitments, standby letters of credit and guarantees detailed in section F below.

F. TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The following table summarizes our contractual obligations and commercial commitments as of December 31, 2011:

	Payment Due						
	Total	Less than 1 year	2 Years	3 Years	4 Years	5 Years	After 5 years
				(in thousands)			
Contractual Obligations							
Short term liabilities primarily vendors and accounts payable (1)	156,560	156,560	--	--	--	--	--
Loans from banks (2)	159,585	10,566	29,677	92,885	26,457	--	--
Debentures (3)	357,285	76,535	23,853	23,382	167,790	65,725	--
Operating leases	20,292	4,491	4,361	3,869	2,955	3,040	1,576
Construction & equipment purchase agreements (4)	9,702	9,702	--	--	--	--	--
Other long-term liabilities	86,015	-	6,359	4,030	3,521	3,270	68,835
Purchase obligations	20,000	7,630	4,467	4,104	3,000	--	799
Total contractual obligations	809,439	265,484	68,717	128,270	203,723	72,035	71,210

(1) Short-term liabilities include primarily our trade accounts payable for equipment and services as well as payroll related commitments.

(2) Loans from banks include principal and interest payments in accordance with the terms of the credit facility agreements with the banks, as well as the estimated impact of our hedging transactions.

(3) Debentures include total amount of principal and interest payments for the presented periods. As of December 31, 2011 approximately 55% of such debentures are convertible with approximately 23% convertible at a conversion ratio of approximately \$1.10 - \$1.25; approximately \$22 million of the \$357.3 million amount has been paid or redeemed during the first quarter of 2012.

(4) Construction & equipment purchase agreements include amounts related to ordered equipment that has not yet been received.

In addition to these contractual obligations, we have committed approximately \$1.3 million in standby letters of credit and guarantees to secure our Fab 2 and Jazz equipment obligations.

The above table does not include other contractual obligations or commitments we have, such as undertakings pursuant to royalty agreements, commissions and service agreements. We are unable to reasonably estimate the total amounts or the time table for such payments to be paid under the terms of these agreements, as the royalties, commissions and required services are a function of future revenues, the volume of business and hourly-based fees. In addition, the above table does not include our liability with respect to our customers, which as of December 31, 2011, amounted to approximately $14 million that may be utilized by them against future purchases of products. We are unable to reasonably estimate the total amounts that may be utilized by our customers since we can not reasonably estimate their future orders in the periods set forth in the above chart.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. DIRECTORS AND SENIOR MANAGEMENT

Set forth below is information regarding our senior management and directors as of December 31, 2011.

Senior Management	Age	Title
	Tower	
Russell C. Ellwanger	57	Chief Executive Officer of Tower and Chairman of the Board of Directors of its wholly-owned subsidiaries, Tower Semiconductor USA, Inc and Jazz Technologies
Oren Shirazi	42	Chief Financial Officer, Senior Vice President of Finance
Dr. Itzhak Edrei	52	President
Ephie Koltin	50	Executive Vice President of Operations
Dalit Dahan	44	Senior Vice President of Human Resources and IT
Nati Somekh Gilboa	37	Senior Vice President , Chief Legal Officer and Corporate Secretary
Yossi Netzer	48	Vice President of Corporate Planning
	Jazz	
Rafi Mor	48	Senior Vice President of Jazz and General Manager of Jazz Semiconductor site, Newport Beach (California)

Directors	Age	Title
Amir Elstein	56	Chairman of the Board
Russell C. Ellwanger	57	Director
Nir Gilad	55	Director
Yoav Doppelt	43	Director
Kalman Kaufman	66	Independent Director
Alex Kornhauser	65	Independent and External Director
Dana Gross	44	Independent Director
Ilan Flato	55	Independent and External Director
Rami Guzman	73	Independent Director

56

Russell C. Ellwanger has served as our Chief Executive Officer since May 2005. Mr. Ellwanger also serves as Chairman of the Board of Directors of our wholly-owned subsidiaries, Tower Semiconductor USA, Inc., Jazz Technologies, Inc. and Jazz Semiconductor and a board member of TowerJazz Japan. From 1998 to 2005, Mr. Ellwanger served in various executive positions for Applied Materials Corporation, including Group Vice President, General Manager of the Applied Global Services (AGS), from 2004 to 2005, Group Vice President, General Manager of the CMP and Electroplating Business Group, from 2002 to 2004. Mr. Ellwanger also served as Corporate Vice President, General Manager of the Metrology and Inspection Business Group, from 2000 to 2002, during which he was based in Israel. From 1998 to 2000, Mr. Ellwanger served as Vice President of Applied Materials' 300-mm Program Office, USA. Mr. Ellwanger served as General Manager of Applied Materials' Metal CVD Division from 1997 to 1998 and from 1996 to 1997, Mr. Ellwanger served as Managing Director of CVD Business Development, during which he was based in Singapore. In addition, Mr. Ellwanger held various managerial positions in Novellus System from 1992 to 1996 and in Philips Semiconductors from 1980 to 1992.

Oren Shirazi has served as our Chief Financial Officer and Senior VP Finance since November 2004. Mr. Shirazi joined us in October 1998 and served as our controller since July 2000, after serving as vice controller since October 1998. Prior to joining us, Mr. Shirazi was employed as an audit manager in the accounting firm of Ratzkovski-Fried & Co., which merged into Ernst & Young (Israel). Mr. Shirazi is a Certified Public Accountant in Israel (CPA). He has an MBA from the Graduate School of Business of Haifa University with honors and a B.A. in economics and accounting from the Haifa University.

Dr. Itzhak Edrei has served as our President since November 2011 after serving as Executive Vice President of Business Groups since September 2008 and as Senior Vice President of Product Lines and Sales since August 2005. From August 2001 to August 2005 Dr. Edrei served as Vice President of Research and Development, having served as Director of Research and Development since 1996. From 1994 to 1996, Dr. Edrei served as our Device and Yield Department Manager. Prior to joining Tower, Dr. Edrei was employed by National Semiconductor as Device Section Head. Dr. Edrei earned his Ph.D. in physics from Bar Ilan University and his post-doctorate from Rutgers University.

Ephie Koltin was appointed Executive Vice President of Operations in November 2011 after serving as Senior Vice President of Worldwide Operations since June 2009 and as Vice President of Business Development since January 2009. Previously, Mr. Koltin served as Vice President Fab 1 since April 2007, and has served as Test and Facility Manager since January 2008, after serving as Vice President of Business Development since August 2005, as Vice President, General Foundry and Mixed Signal Technology since 2003 and as Senior Director, FAB 2 Process Engineering since 2000. From 1995 to 1999, Mr. Koltin served in several senior positions as Director, NVM Technology, CIS technology and ERS manager, Fab 1. Prior to joining Tower, Mr. Koltin was employed at National Semiconductor and the Technion – Israel Institute of Technology. Mr. Koltin holds a B.Sc. in mechanical engineering and M.Sc. in materials engineering from the Technion – Israel Institute of Technology.

Dalit Dahan serves as Senior Vice President of Human Resources and IT after being appointed IT Manager in January 2008, after serving as Vice President of Human Resources since April 2004. Ms. Dahan joined us in November 1993 and served as Personnel Manager since April 2000, after having served as Compensation & Benefits Manager and in various other positions in the Human Resources Department. Prior to joining us, Ms. Dahan served as Manager of the North Branch of O.R.S - Manpower Company for 3 years. Ms. Dahan holds a B.A. in social science from Haifa University and an MBA from the University of Derby.

Nati Somekh serves as Senior Vice President, Chief Legal Officer and Corporate Secretary, after serving as Vice President, Chief Legal Officer and Corporate Secretary since September 2008, after serving as Corporate Secretary and General Counsel since March 2005, and as Associate General Counsel since May 2004. From 2001 to 2004, Ms. Somekh was employed by Goldsobel & Kirshen, Adv. Ms. Somekh holds an LL.M. and J.D. from Boston University and a B.A. from Johns Hopkins University. She is a member of the Israeli Bar Association and is admitted as an attorney in the State of New York.

Yossi Netzer was appointed Vice President of Corporate Planning in November 2008, after serving as General Manager of Mixed Signal, RF & Power Management Product Line since 2005 and as Director, FAB 2 Yield & Device Engineering Manager since 2000. From 1995 to 2000, Mr. Netzer served in various engineering management positions within the R&D division dealing with CMOS, Mixed Signal, RF, and NVM Technologies. Prior to joining Tower, Mr. Netzer was employed at National Semiconductor and the Technion – Israel Institute of Technology. Mr. Netzer holds a B.Sc. degree in electrical engineering from the Technion – Israel Institute of Technology.

Rafi Mor was appointed as Senior Vice President and General Manager ("GM") of Jazz Semiconductor (Tower's wholly-owned subsidiary) Newport Beach, California site in September 2008. In October 2010, Rafi was nominated to be the manager of our Newport Beach Fab, in addition to his GM role. Previously, Mr. Mor served in Tower Semiconductor Ltd. as Vice President of Business Development since April 2007, after serving as Vice President and Fab 2 Manager since August 2005, and as Fab 1 Manager since March 2003. From November 2000 to March 2003, Mr. Mor served as Senior Director of Process Device & Yield of Fab 1. From 1998 to 2000, Mr. Mor served as Director of Equipment Reliability & Support of Fab 1. Previously, Mr. Mor was employed by National Semiconductor in various engineering and management capacities. Mr. Mor holds an MA and B.A. in chemical engineering from Ben Gurion University.

Amir Elstein was appointed as Chairman of the Board in January 2009 and as a member of the Stock Option and Compensation Committee since June 2009. Mr. Elstein serves as Chairman of the Board of Directors of Israel Corp. and as a member of the Board of Directors of Teva Pharmaceutical Industries Ltd. Mr. Elstein serves as Chairman of the Board of Governors of the Jerusalem College of Engineering. He also serves as chairman/member of the board of several academic, scientific and educational, social and cultural institutions. Mr. Elstein was a member of Teva Pharmaceutical Industries senior management team from 2005 to 2008, where he ultimately held the position of the Executive Vice President at the Office of the CEO, overseeing Global Pharmaceutical Resources. Prior thereto, he was an executive at Intel Corporation, where he worked for 23 years, eventually serving as General Manager of Intel Electronics Ltd., an Israeli subsidiary of Intel. Mr. Elstein received his B.Sc. in physics and mathematics from the Hebrew University in 1980 and his M.Sc. in the Solid State Physics Department of Applied Physics from the Hebrew University in 1982. In 1992, Mr. Elstein received his diploma of Senior Business Management from the Hebrew University.

Nir Gilad has served as a director since May 2007. Mr. Gilad has served as Chief Executive Officer of the Israel Corporation since June 2007. He previously served as Vice-Chief Executive Officer of the Israel Corporation from May 2006 to May 2007. From 2004 to2006, Mr. Gilad served as Vice-Chief Executive Officer of Migdal Holdings Insurance and Financings Ltd., Chief Executive Officer of Migdal Investment Management 2001 Ltd. and chairman of Migdal Capital Markets Ltd. In addition, from 1999-2003, Mr. Gilad served as General Comptroller of the Treasury Office of the State of Israel. Throughout the years, Mr. Gilad was a member and chairman of several boards of directors. Mr. Gilad holds a B.A. in economics and agricultural management in natural sciences from the Hebrew University of Jerusalem and an M.A. in business administration from Bar Ilan University.

Yoav Doppelt has served as a director since October 2011. Mr. Doppelt is the Chief Executive Officer of Ofer Investments Group. He joined the Ofer Group in 1996 and has been with Ofer Hi-Tech from its inception in 1997, defining the vision and operational methodology of its private equity and high-tech investments. Mr. Doppelt currently serves as a member of the boards of directors of a number of companies, including Israel Corporation Ltd., Lumenis Ltd, Enzymotec Ltd., MGVS Ltd., Yozma III Management and Investments Ltd. and RayV Inc. and is actively involved in numerous investments within the Israeli private equity and high-tech arenas. Mr. Doppelt has extensive business experience in growth companies and has successfully led several private equity exit transactions. Mr. Doppelt has held various finance and managerial positions in the Ofer Group since joining the group. He holds a bachelor's degree in economics and management from the Faculty of Industrial Management at the Technion – Israel Institute of Technology and an MBA degree from Haifa University.

58

Kalman Kaufman has served as a director and as a member of our Stock Option and Compensation Committee since May 2008 and as chairman since February 2011. Mr. Kaufman has served as a member of our Audit Committee from August 2005. Mr. Kaufman also served as Corporate Vice President at Applied Materials from 1994 to 2005. Between 1985 and 1994, Mr. Kaufman served as President of KLA Instruments Israel, a company he founded, and General Manager of Kulicke and Soffa Israel. Mr. Kaufman is currently member of the board of directors of Jordan Valley Semiconductors, Optimal Test and Invisia. He is also member of the management board of Kineret College and Chairman of the Policy Institute of Science Technology and Innovation. Mr. Kaufman holds engineering degrees from the Technion - Israel Institute of Technology.

Alex Kornhauser has served as an independent and external director, as a member of the Audit Committee since August 2008 and as chairman of the Audit Committee since January 2011. Mr. Kornhauser has served as a member of the Stock Option and Compensation Committee since June 2009. Mr. Kornhauser served as Senior VP, General Manager of Global Operations at Numonyx Corporation from March 2008 to August 2010. From January 1978 to March 2008, Mr. Kornhauser held many positions at Intel Corporation from design engineer, project manager, department manager, engineering manager and general manager of certain groups, segments and plants. More specifically, from August 2000 to May 2007 he served as Intel Israel Site GM, from January 2006 until March 2008 he served as VP of the Flash Memory Group, from December 2004 to December 2005 Mr. Kornhauser served as VP of TMG NVM Strategic Segment, from January 2001 to November 2004 he served as VP of TMG F18 Plant Manager and from January 1996 to December 2000 he served as F18 General Manager. Mr. Kornhauser holds a B.S. in electronics from Bucharest Polytechnic Institute in Romania.

Dana Gross has served as an independent director since November 2008 and has served as a director on the board of Jazz Semiconductor, Inc., our wholly owned subsidiary, since March 2009. Dana is the CEO of Btendo, a developer of personal projection technologies and solutions and a Venture Partner at Carmel Ventures, a leading Israeli Venture Capital firm. From 2006 to 2008, Ms. Gross was a Senior VP, Israel Country Manager at SanDisk Corporation. From 1992 to 2006, Ms. Gross held various senior positions at M-Systems, including Chief Marketing Officer, VP World Wide Sales, President of M-Systems Inc. (US Subsidiary) and CFO, VP Finance and Administration. In addition, Ms. Gross served as a director of M-Systems Ltd., Audiocodes Ltd. and PowerDsine Ltd. Ms. Gross holds a B.Sc. in industrial engineering from Tel-Aviv University and an M.A. in business administration from San Jose State University.

Ilan Flato has served as an independent and external director and as a member of the Audit Committee since April 2009. Mr. Flato has served as a Senior Non-Executive Director of Emblaze Ltd. since April 2006. Mr. Flato also serves as an external director and chairman of the Investment Committee in "Gal" and "Hagomel" mutual fund. Since January 2012, Mr. Flato serves as President of the Association of Publicly Traded Companies. Until 2004, Mr. Flato served as the VP for planning, economics and online banking in United Mizrahi Bank and as the Chief Economist of the bank. From 1992 and 1996, Mr. Flato served as the Economic Advisor to the Prime Minister of Israel. Prior to this position, Mr. Flato served in the Treasury Office as the deputy director of the budget department. In addition, Mr. Flato served as a member of the board of directors of many government owned companies. Mr. Flato holds a B.A. in economics from Tel-Aviv University and an LL.M from Bar-Ilan University.

Rami Guzman has served as a director since February 2009 and as a member of our Audit Committee since August 2011. Mr. Guzman is a director in several public and private companies and serves as consultant to high-tech companies and to governmental organizations. Mr..Guzman held various senior positions at Motorola Inc. and Motorola Israel Ltd. since 1985, including VP of Motorola Inc. and Director of Motorola Israel Ltd. In addition, until July 2004, Mr. Guzman was the CFO of Motorola Israel Ltd. Prior to joining Motorola, Mr. Guzman worked for the Ministry of Finance first as senior assistant and deputy to the Director of the Budget and then as Government-wide MIS and IT Commissioner. Mr. Guzman holds a B.A. in economics (1963) and an M.A. in business and public administration (1969) from the Hebrew University of Jerusalem. He was a Research Fellow at Stanford University and

Stanford Research Institute, California, USA, and completed Ph.D. studies at the Hebrew University of Jerusalem.

B. COMPENSATION

For the year ended December 31, 2011, we paid or accrued to all our directors and senior management, as a group, an aggregate of 5.9 million, in salaries, fees and bonuses. The total amount set aside or accrued in the year ended December 31, 2011 to provide for severance, retirement and similar benefits for such persons was $0.7 million.

In August 2011, our shareholders approved the following terms of compensation for our directors who are not affiliated with major shareholders of the Company and are not Company employees, after the same was approved by the Audit Committee and Board of Directors: (i) the payment of annual fees and participation fees (per meeting) to such directors (each an “Independent Director”) to the maximum extent permitted under the regulations promulgated under the Israeli Companies Law that govern the payment of external directors (Companies Law Regulations (Rules Regarding the Remuneration and Expenses of External Directors) – 2000 (the “Remuneration Regulations”)), as amended by regulations providing special concessions to dual-listed companies; and (ii) reimbursement for travel expenses in accordance with the Company's travel reimbursement policy for directors.

In 2011, we granted an aggregate of 6,759,854 options to acquire ordinary shares to our directors and senior management (Including the options granted to our CEO).

In August 2011, we granted 3,944,854 options to our CEO to purchase ordinary shares exercisable at $1.15 per share. This grant was approved by our shareholders following approval by the Audit Committee and Board. The options vest 50% on the second anniversary of the date of grant and 50% on the third anniversary of the grant.

In August 2011, we awarded a one-time grant under our Independent Directors’ Plan to each of our Independent Directors of 75,000 options exercisable at $0.80 per share. The grant was approved by our shareholders following approval by the Audit Committee and Board of Directors. These options vest over three years on a monthly basis until fully vested.

In August 2011 and November 2011 , we made Tenure Grants under our Independent Directors’ Plan of 150,000 options each to purchase ordinary shares to two of our Independent Directors who completed three years of service as Independent Directors, exercisable at $0.8 and $0.76 per share, respectively.

For further information concerning our stock option plans and outstanding stock options, see Item 6 E “Share Ownership” and Note 17B to the consolidated financial statements for the year ended December 31, 2011 included in this report.

In August 2011, our shareholders approved (i) an increase in our CEO’s annual base salary by $50,000 to $600,000 per annum; and (ii) revise his 2011 annual performance bonus matrix under which such bonus will not exceed 225% of his new annual base salary.

C. BOARD PRACTICES

Our Articles of Association provide that the Board of Directors shall consist of at least five and no more than 11 members. All directors, except for external directors, hold office until their successors are elected at the next annual general meeting of shareholders.

Our Articles of Association provide that any director may, by written notice to us, appoint another person to serve as an alternate director, and may cancel such appointment. Any person who is not already a director may act as an alternate, and the same person may not act as the alternate for more than one director at a time. The term of appointment of an alternate director may be for one meeting of the Board of Directors or for a specified period or until notice is given of the cancellation of the appointment.

Board members are not entitled to benefits in the event of termination of service.

The Israeli Companies Law – 1999 (the "Companies Law") requires Israeli companies with shares that have been offered to the public in or outside of Israel to appoint no less than two external directors. No person may be appointed as an external director if the person or the person's relative, partner, employer or any entity under the person's control, has or had, on or within the two years preceding the date of the person's appointment to serve as external director, any affiliation with the company or any entity controlling, controlled by or under common control with the company. The term "affiliation" includes:

- an employment relationship;
- a business or professional relationship maintained on a regular basis;
- control; and
- service as an office holder.

- Relatives of the controlling shareholder may not be appointed as external directors of a company.

- If the company does not have a controlling shareholder or a shareholder who holds company shares entitling him to vote at least 25% of the votes in a shareholders meeting, no person may be appointed as an external director if the person or the person's relative, partner, employer or any entity under the person's control, has or had, on or within the two years preceding the date of the person's appointment to serve as external director, any affiliation on the date of the person's appointment with the chairman of the Board, chief executive officer, substantial shareholder or chief financial officer.

- No person may serve as an external director if the person, the person's relative, spouse, employer or any entity controlling or controlled by the person, has a business or professional relationship with someone with whom affiliation is prohibited, even if such relationship is not maintained on a regular basis, except negligible relationships.

- A public company, entity controlling or entity under common control with the company may not grant an external director, his spouse or child, any benefit, and may not appoint him, his spouse or child, to serve as an officer of the company or of an entity under common control with the company , may not employ or receive professional services in consideration from him or an entity controlled by him unless two years have passed as of the end of service as external director in the company, and regarding a relative who is not a spouse or child – one year as of the end of service as external director.

61

A person shall be qualified to serve as an external director only if he or she possesses accounting and financial expertise or professional qualifications. At least one external director must possess accounting and financial expertise. The conditions and criteria for possessing accounting and financial expertise and professional qualifications were determined in regulations promulgated by the Israeli Minister of Justice in consultation with the Israeli Securities Authority. The regulations mandate that a person is deemed to have “expertise in finance and accounting” if his or her education, experience and qualifications provide him or her with expertise and understanding in business matters - accounting and financial statements, in a way that allows him or her to understand, in depth, the company’s financial statements and to encourage discussion about the manner in which the financial data is presented.

The company’s board of directors must evaluate the proposed external director’s expertise in finance and accounting, by considering, among other things, his or her education, experience and knowledge in the following: (i) accounting and auditing issues typical to the field in which the company operates and to companies of a size and complexity similar to such company; (ii) a company’s external public accountant’s duties and obligations; (iii) preparing company financial statements and their approval in accordance with the Companies Law and the Israeli Securities Law.

A director is deemed to be “professionally qualified” if he or she meets any of the following criteria: (i) has an academic degree in any of the following professions: economics, business administration, accounting, law or public administration; (ii) has a different academic degree or has completed higher education in a field that is the company’s main field of operations, or a field relevant to his or her position; or (iii) has at least five years experience in any of the following, or has a total of five years experience in at least two of the following: (A) a senior position in the business management of a corporation with significant operations, (B) a senior public position or a senior position in public service, or (C) a senior position in the company’s main field of operations. The board of directors here too must evaluate the proposed external director’s “professional qualification” in accordance with the criteria set forth above.

The candidate to serve as an external director must sign a declaration stating that the abovementioned criteria are met as required by law for the appointment of such candidate as an external director.

No person may serve as an external director if the person’s position or other business activities create, or may create, a conflict of interest with the person’s responsibilities as an external director or may otherwise interfere with the person’s ability to serve as an external director. If, at the time external directors are to be appointed, all current members of the board of directors are of the same gender, then at least one external director must be of the other gender. If, at the time external directors are to be appointed, all current members of the board of directors who are not controlling shareholders or relatives of such shareholders are of the same gender, then at least one external director must be of the other gender.

External directors are to be elected by a majority vote at a shareholders’ meeting, provided that either:

- the majority of shares voted at the meeting, including at least one-half of the shares held by non-controlling shareholders that voted at the meeting, vote in favor of election of the director; or

- the total number of shares held by non-controlling shareholders voted against the election of the director does not exceed two percent of the aggregate voting rights in the company.

The initial term of an external director is three years and may be extended for additional three year terms, subject to certain conditions (which also can depend on whether the external director was nominated by the board of directors or by the shareholders). External directors may be removed only by the same majority required for their election as stipulated herein above, or by a court, and then only if the external directors cease to meet the statutory qualifications for their appointment or if they violate their duty of loyalty to the company. Each committee of a company's board of directors must include at least one external director.

Mr. Ilan Flato and Mr. Alex Kornhauser currently serve as our external directors. Mr. Kornhauser was appointed for an initial three-year term expiring in August 2011 and was reappointed for an additional three-year term commencing such date. Mr. Flato was appointed for an initial three-year term expiring in April 2012 and was recently reappointed by the shareholders for an additional three-year term commencing such date.

An external director is entitled to compensation, as provided in regulations adopted under the Israeli Companies Law, and is otherwise prohibited from receiving any other compensation, directly or indirectly, in connection with service provided as an external director.

The Companies Law requires public companies to appoint an audit committee. Mr. Ilan Flato, Mr. Alex Kornhauser and Mr. Kalman Kaufman serve on Tower's audit committee, and Mr. Alex Kornhauser serves as the Audit Committee chairman. The responsibilities of the audit committee include reviewing the company's financial statements, monitoring the company's independent auditors, identifying irregularities in the management of the company's business and approving related party transactions as required by law, approving the terms of compensation of company officers, classifying company transactions as extraordinary transactions or non-extraordinary transactions and as material or non-material transactions in which an officer has an interest (which will have the effect of determining the kind of corporate approvals required for such transaction), assessing the proper function of the company's internal audit regime and determining whether its internal auditor has the requisite tools and resources required to perform his role and to regulate the companies rules on employee complaints, and reviewing the scope of work of the company's independent accountants and their fees. An audit committee must consist of at least three directors, including all of the external directors of the company. A majority of the members of the audit committee must be independent or external directors. The Companies Law defines independent directors as either external directors or directors who: (1) meet certain of the requirements of an external director, (2) have been directors in the company for an uninterrupted duration of less than 9 years (and any interim period during which such person was not a director which is less than 2 years shall not be deemed to interrupt the duration), and (3) were classified as such by the company. The chairman of the board of directors, any director employed by or otherwise providing services to the company, and a controlling shareholder or any relative of a controlling shareholder, and any director who derives his salary primarily from the controlling shareholder may not be a member of the audit committee.

The chairman of the audit committee must be an external director, and all audit committee decisions must be made by a majority of the committee members, of which the majority of members present are independent and external directors. Any person who is not eligible to serve on the audit committee is further restricted from participating in its meetings and votes, unless the chairman of the audit committee determines that such person's presence is necessary in order to present a certain matter, provided however, that company employees who are not controlling shareholders or relatives of such shareholders may be present in the meetings but not in the actual votes and likewise, and company counsel and secretary who are not controlling shareholders or relatives of such shareholders may be present in meetings and decisions if such presence is requested by the audit committee.

Under the Companies Law, the board of directors must appoint an internal auditor, who is recommended by the audit committee. The role of the internal auditor is to examine, among other matters, whether the company's actions comply with the law and orderly business procedure. Under the Companies Law, the internal auditor may be an employee of the company but not an office holder, an affiliate, or a relative of an office holder or affiliate, and he may not be the company’s independent auditor or its representative.

The board of directors has established a stock option and compensation committee. Mr. Alex Kornhauser, Mr. Kalman Kaufman and Mr. Amir Elstein serve as the committee members. The committee meets at least once a year. The primary function of this committee is to approve our employee compensation policy and determine remuneration and other terms of employment for our officers. In setting our remuneration policy, the committee considers a number of factors including:

- the overall employment market environment;
- the basic salaries and benefits available to comparable officers at comparable companies;
- the need to attract and retain officers of an appropriate caliber;
- the need to ensure such executives' commitment to the future success of our company by means of incentive schemes;
- the performance of the officer; and
- financial and operating results of our company.

D. EMPLOYEES

The following table sets forth for the last three fiscal years, the number of our employees engaged in the specified activities.

	As of December 31,		
	2011	2010	2009
Process and product engineering, R&D and design	936	427	352
Manufacturing and operations	1,822	1,211	969
Manufacturing support	219	141	127
Sales and marketing, finance & administration..	197	137	128
Total	3,174	1,916	1,576

As of December 31, 2011, we had 1,191 employees located in Israel , 695 employees located in the United States, 1,280 employees located in Japan, 5 employees located in Korea, 1 employee located in China, 1 employee located in Taiwan and 1 employee located in Germany.

Except for an arrangement regarding pension contributions, Tower has no collective bargaining agreements with any of its Israeli employees. However, in Israel we are subject to certain labor statutes and national labor court precedent rulings, as well as to certain provisions of the collective bargaining agreements between the Histadrut (General Federation of Labor in Israel) and the Coordination Bureau of Economic Organizations, by virtue of expansion orders issued in accordance with relevant labor laws by the Israeli Ministry of Labor and Welfare, and which apply such agreement provisions to our employees even though they are not directly part of a union that has signed a collective bargaining agreement. The laws and labor court rulings that apply to our employees principally concern the minimum wage laws, procedures for dismissing employees, determination of severance pay, leaves of absence (such as annual vacation or maternity leave), sick pay and other conditions for employment. The expansion orders which apply to our employees principally concern the requirement for length of the work day and workweek, mandatory contributions to a pension fund, annual recreation allowance, travel expenses payment and other conditions of employment. In accordance with these provisions, the salaries of our employees are partially indexed to the Consumer Price Index in Israel.

Under the special collective bargaining agreement to which we are party in regard to our Israeli employees, we are required to contribute funds to an employee's "Manager's Insurance" fund and/or pension fund. Such funds generally provide a combination of savings plans, insurance and severance pay benefits to the employee, securing his or her right to receive pension or giving the employee a lump sum payment upon retirement, under certain circumstances, if legally entitled, upon termination of employment. To the Manager's Insurance fund, the employee usually contributes an amount equal to 5% of his or her wages and the employer usually contributes an additional 13.3% to 15.8%. To the pension fund the employee usually contributes an amount equal to between 5% and 6% of his or her wages and the employer usually contributes an additional 13.7% to 17.3%. Israeli law generally requires severance pay upon the retirement or death of an employee or termination of employment without due cause. Under our special collective bargaining agreement, we are exempt from such payment as long as, and for period during which, we contribute on monthly basis the above mentioned benefits to such employee's pension fund and/or Manager's Insurance.

A portion of Jazz's employees at its Newport Beach, California fab are represented by a union and covered by a collective bargaining agreement. Jazz maintains a defined benefit pension plan for certain of its employees covered by a collective bargaining agreement that provides for monthly pension payments to eligible employees upon retirement. The pension benefits are based on years of service and specified benefit amounts. In addition, the bargaining agreement includes a postretirement medical plan to certain employees. For certain eligible bargaining unit employees who terminate employment, Jazz provides a lump-sum benefit payment.

Labor agreements pertaining to the employees of TJP determine the obligation of TJP to make payments to employees upon retirement or upon termination. The liability for termination benefits is based upon length of service and the employee's monthly salary multiplied by a certain ratio. TJP does not cover the termination liability through deposits to benefit funds.

E. SHARE OWNERSHIP

As of March 31, 2012, our directors and senior managers beneficially owned an aggregate of 30.2 million shares underlying options held by such persons that are currently vested or which vest within 60 days of such date. These options have an average exercise price of $1.13 per share and the options expire between 2012 and 2022. Except for our CEO, who beneficially owns 5.61% of our outstanding shares, no individual director or senior manager beneficially owns 2% or more of our outstanding ordinary shares.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. MAJOR SHAREHOLDERS

The following set forth information, as of March 31, 2012, concerning the beneficial ownership (as defined in Rule 13d-3 under the Securities Exchange Act of 1934, as amended), and on a diluted basis, of ordinary shares by any person who is known to own at least 5% of our issued and outstanding ordinary shares. As of such date, approximately 322 million ordinary shares were issued and outstanding. The voting rights of our major shareholders do not differ from the voting rights of other holders of our ordinary shares.

Identity of Person or Group	Percent of Class(1)	Percent of Class (Diluted)(2)
Israel Corporation Ltd. (3)(4)	41.75 %	22.53 %
Bank Leumi Le-Israel, B.M (5)	23.51 %	10.10 %
Bank Hapoalim, B.M (6)	24.54 %	10.56 %
Micron Technology, Inc	6.12 %	2.01 %

(1) Assumes the holder's beneficial ownership of all Tower ordinary shares and all securities that the holder has a right to purchase within 60 days. Also assumes that no other exercisable or convertible securities held by other shareholders has been exercised or converted into shares of the Company.

(2) Assumes that all currently outstanding securities to purchase ordinary shares, other than those which cannot be calculated as of the date of the date referred to above, have been exercised by all holders.

(3) Based on information verified with Israel Corp., it currently holds approximately 14.3 million shares, as well as debentures convertible into 2.6 million shares, capital notes converted into 206.1 million shares and 0.04 million Ordinary Shares issuable upon the exercise of options.

(4) Based on information provided by Bank Leumi, it currently holds approximately 0.3 million shares, as well as warrants exercisable to acquire 2.1 million shares and capital notes convertible into 96.4 million shares.

(5) Based on information provided by Bank Hapoalim, it currently holds approximately 4.3 million shares, as well as warrants exercisable to acquire 2.6 million shares and capital notes convertible into 96.4 million shares.

(6) Based on information provided by Micron, it currently holds approximately 19.7 million shares.

Israel Corp., Bank Leumi and Bank Hapoalim have each increased their beneficial interest in our Company over the last years primarily as a result of the acquisition of capital notes under the amendments to the Credit Facility agreement described above under Item 5. Operating and Financial Review and Prospects - B. Liquidity and Capital Resources".

As of March 31, 2012, there were a total of 41 holders of record of our ordinary shares, of which 26 were registered with addresses in the United States. Such United States record holders were, as of such date, the holders of record of approximately 65% of our outstanding ordinary shares. The number of record holders in the United States is not representative of the number of beneficial holders nor is it representative of where such beneficial holders are resident since many of these ordinary shares were held of record by brokers or other nominees (including one U.S. nominee company, CEDE & Co., which held approximately 60% of our outstanding ordinary shares as of said date).

66

B. RELATED PARTY TRANSACTIONS

Agreements with Israel Corp and the Banks. For information related to amendments to our Credit facility and related agreements with Israel Corp. and the Banks see Item 5. Operating and Financial Review and Prospects - B. Liquidity and Capital Resources" of this annual report and Note 12B to the consolidated financial statements included in this annual report, which discussions are incorporated by reference herein.

C. INTERESTS OF EXPERTS AND COUNSEL

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. CONSOLIDATED STATEMENTS AND OTHER FINANCIAL INFORMATION

Our consolidated financial statements are incorporated herein by reference to pages following the signature page of this Annual Report.

Legal Proceedings

During 2008, an International Trade Commission ("ITC") action was filed by Agere/LSI Corporation ("LSI"), alleging infringement of U.S. patent 5,227,335 (the '335 patent) under Section 337 of the Tariff Act of 1930 by 17 corporations. Following that initial filing, in October 2008, LSI amended the ITC complaint requesting to add Tower, Jazz and three other corporations as additional respondents to the investigation. In September 2009, the ITC administrative law judge ("ALJ") ruled against LSI and in favor of the respondents, determined that the '335 patent claims asserted by LSI are invalid. In November 2009, in response to a Petition for Review filed by LSI, the ITC determined that it would review the ALJ's determination on patent invalidity. In March 2010, the ITC issued a notice of final determination that there was no violation of Section 337, ruling that the LSI '335 patent claims were invalid, and terminated the ITC investigation.

LSI appealed the final determination to the U.S. Court of Appeals for the Federal Circuit ("Federal Circuit"). While that appeal was pending, the '335 patent expired. The ITC moved to dismiss LSI's appeal as moot, which LSI conceded. In November, 2010, the Federal Circuit issued an order vacating the ITC's final determination and remanded the investigation to the ITC with instructions to dismiss the Investigation as moot.

LSI also previously filed an action for patent infringement of the '335 patent against us and other corporations in the United States District Court for the Eastern District of Texas, which action was stayed pending the conclusion ITC Investigation. On June 16, 2011, the District Court granted a motion by LSI to dismiss the Texas action without prejudice. As a result of that dismissal, there is no longer any legal proceeding currently pending by LSI against the Company.

In connection with Jazz's aerospace and defense business, its facility security clearance and trusted foundry status, Tower and Jazz are working with the Defense Security Service of the United States Department of Defense ("DSS") to develop an appropriate structure to mitigate any concern of foreign ownership, control or influence over the operations of Jazz specifically relating to protection of classified information and prevention of potential unauthorized access thereto. In order to safeguard classified information, it is expected that the DSS will require adoption of a Special Security Agreement ("SSA"). The SSA may include certain security related restrictions, including restrictions on the composition of the board of directors, the separation of certain employees and operations, as well as restrictions on disclosure of classified information to Tower. The provisions contained in the SSA may also limit the projected synergies and other benefits to be realized from the merger. There is no assurance when, if at all, an SSA will be reached.

From time to time we are a party to various litigation matters incidental to the conduct of our business. As of today, there is no pending or threatened legal proceeding to which we are a party, that, in the opinion of our management, is likely to have a material adverse effect on our future financial results or financial condition.

B. SIGNIFICANT CHANGES

No significant change has occurred since December 31, 2010, except as disclosed in this annual report.

ITEM 9. THE OFFER AND LISTING

Our ordinary shares are listed and traded on the NASDAQ Stock Market (on the NASDAQ Global Market through March 16, 2012 and on the NASDAQ Capital Market since that date) and on the Tel Aviv Stock Exchange (TASE) under the symbol "TSEM".

The following table sets forth, for the periods indicated, the high and low reported sales prices of the ordinary shares on the NASDAQ Stock Market and Tel Aviv Stock Exchange:

	NASDAQ Stock Market		Tel Aviv Stock Exchange	
	High ($)	Low ($)	High (NIS)	Low (NIS)
Period				
March 2012	0.94	0.68	3.50	2.54
February 2012	0.90	0.71	3.48	2.62
January 2012	0.76	0.60	2.75	2.30
December 2011	0.69	0.60	2.57	2.27
November 2011	0.81	0.63	2.96	2.27
October 2011	0.87	0.60	3.18	2.29
First quarter 2012	0.94	0.60	3.50	2.30
Fourth quarter 2011	0.87	0.60	3.18	2.27
Third quarter 2011	1.20	0.62	4.10	2.31
Second quarter 2011	1.45	1.02	5.07	3.49
First quarter 2011	1.54	1.15	5.49	4.10
Fourth quarter 2010	1.69	1.34	6.00	4.85
Third quarter 2010	1.66	1.25	6.12	5.04
Second quarter 2010	1.74	1.25	6.48	4.90
First quarter 2010	1.87	0.99	7.02	3.71
2011	1.54	0.60	5.49	2.27
2010	1.87	0.99	7.02	3.71
2009	1.49	0.13	5.13	0.50
2008	1.45	0.09	5.50	0.36
2007	2.08	1.20	8.88	5.25

ITEM 10. ADDITIONAL INFORMATION

Articles of Association

Registration Number and Purposes

Our registration number with the Israeli Companies Registrar is 520041997. Pursuant to Section 4 of our Articles of Association ("Articles"), Tower's objective is to engage in any lawful activity.

Articles of Association

Our Articles were adopted in November 2000, and as amended, provide for an authorized capital of NIS 1,400 million divided into 1,400 million ordinary shares.

Tower has currently outstanding only one class of equity securities, ordinary shares, par value NIS 1.00 per share. Holders of Tower ordinary shares have one vote per share, and are entitled to participate equally in the payment of dividends and share distributions and, in the event of liquidation of Tower, in the distribution of assets after satisfaction of liabilities to creditors. No preferred shares are currently authorized.

Our Articles require that we hold our annual general meeting of shareholders each year no later than 15 months from the last annual meeting, at a time and place determined by the Board of Directors, upon at least 21 days' prior notice to our shareholders. Two or more shareholders holding at least 33% of the voting rights personally or by proxy will constitute a quorum for the meeting. Shareholders may vote in person or by proxy, and are required to prove title to their shares as required by the Companies Law pursuant to procedures established by the Board of Directors. Resolutions regarding the following matters shall be passed by an ordinary majority of those voting at the general meeting.

- amendments to our Articles;
- appointment and termination of our independent auditors;
- appointment and dismissal of directors (except of external directors);
- approval of acts and transactions requiring general meeting approval under the Companies Law;
- increase or reduction of authorized share capital or the rights of shareholders or a class of shareholders;
- any merger as provided in section 320 of the Companies Law; and
- the exercise of the Board of Directors' powers by the general meeting, if the Board of Directors is unable to exercise its powers and the exercise of any of its powers is essential for Tower's proper management, as provided in section 52(a) of the Companies Law.

A special meeting may be convened by the request of two directors or by written request of one or more shareholders holding at least 5% of our issued share capital and 1% of the voting rights or one or more shareholders holding at least 5% of the voting rights. Shareholders requesting a special meeting must submit their proposed resolution with their request. Within 21 days of receipt of the request, the Board must convene a special meeting and send out notices setting forth the date, time and place of the meeting. Subject to exceptions, such notice must be given at least 21 days but not more than 35 days prior to the special meeting.

Exemption and Indemnification Agreements with Directors

Tower entered into exemption and indemnification agreements with the members of its Board of Directors, which were recently amended to reflect certain amendments to the Israeli Securities Law and the Israeli Companies Law, pursuant to which, subject to the limitations set forth in the Israeli Companies Law, the Israeli Securities Law and its Articles of Association, they will be exempt from liability for breaches of the duty of care owed by them to the Company or indemnified for certain costs, expenses and liabilities with respect to events specified in the exemption and indemnification agreements. Tower's shareholders approved these amended exemption and indemnification agreements.

The Companies Law

We are subject to the provisions of the Companies Law. The Companies Law codifies the fiduciary duties that "office holders," including directors and executive officers, owe to a company. An office holder, as defined in the Companies Law, is a general manager, chief business manager, deputy general manager, vice general manager, executive vice president, vice president, another manager directly subordinate to the managing director or any other person assuming the responsibilities of any of the foregoing positions without regard to such person's title, or a director. Each person listed in the table in "Item 6. Directors, Senior Management and Employees" above is an office holder of the Company. Under the Companies Law, all arrangements as to compensation of office holders who are not directors require approval of the audit committee followed by the board of directors . With the exception of compensation of external directors in an amount specified in the regulations adopted under the Companies Law, arrangements regarding the compensation of directors also require shareholder approval following the approval by the audit committee and the board of directors.

The Companies Law requires an office holder to promptly disclose any personal interest that he or she may have and all related material information known to him or her, in connection with any existing or proposed transaction by the company. In addition, if the transaction is an extraordinary transaction, the office holder must also disclose any personal interest held by the office holder's spouse, siblings, parents, grandparents, descendants, and spouse's descendants, siblings and parents , and the spouse of any of the foregoing, or any corporation in which the office holder is a 5% or greater shareholder, holder of 5% or more of the voting power, director or general manager or in which he or she has the right to appoint at least one director or the general manager. An extraordinary transaction is defined as a transaction not in the ordinary course of business, not on market terms, or that is likely to have a material impact on the company's profitability, assets or liabilities.

The Companies Law requires that specific types of transactions, actions and arrangements be approved as provided for in a company's articles of association and in some circumstances by the company's audit committee, board of directors and shareholders. For example, the Companies Law requires that agreements regarding the terms of compensation, insurance or indemnification of directors be approved by the company's audit committee, board of directors and shareholders.Agreements regarding the terms of compensation, insurance or indemnification of officers will need to be approved by the company's audit committee (or compensation committee to the extent that it complies with the statutory requirements which apply to the audit committee) and board of directors. In the case of a transaction with an office holder that is not an extraordinary transaction, after the office holder complies with the above disclosure requirements, only board approval is required, unless the Articles provide otherwise. If the transaction is an extraordinary transaction, then, in addition to any approval required by the Articles it must be approved first by the audit committee and then by the board of directors, and, in specific circumstances, by a meeting of the shareholders. Subject to exceptions set forth in the Companies Law, an any individual who has a personal interest in a matter that is considered at a meeting of the board of directors or the audit committee may not be present during the relevant discussion at such meeting or vote on such matter.

The Companies Law applies the same disclosure requirements to a controlling shareholder of a public company, which is defined as a shareholder who has the ability to direct the activities of a company, other than if this power derives solely from the shareholder's position on the board of directors or any other position with the company and includes a shareholder that holds 25% or more of the voting rights if no other shareholder owns more than 50% of the voting rights in the company. Extraordinary transactions with a controlling shareholder or in which a controlling shareholder has a personal interest, and agreements relating to employment and compensation terms of controlling shareholders require the approval of the audit committee, the board of directors and the shareholders of the company. The shareholder approval must either include at least one-half of the shares held by disinterested shareholders who are present, in person or by proxy, at the meeting, or, alternatively, the total shareholdings of the disinterested shareholders who vote against the transaction must not represent more than two percent of the voting rights in the company.

Agreements and extraordinary transactions with duration exceeding three years are subject to re-approval once every three years by the audit committee, board of directors and the shareholders of the company. Extraordinary transactions may be approved in advance for a period exceeding three years if the audit committee determines such approval reasonable under the circumstances. In addition, agreements and extraordinary transactions with duration exceeding three years which were approved prior to May 14, 2011 will need to be re-approved by the proper corporate actions at the later of (i) the first general meeting held after May 14, 2011, (ii) November 14, 2011 or (iii) the expiration of three years from the date on which they were originally approved, , even though they were properly approved prior to the passing of the amendment to the Companies Law.

In addition to approval by a company's board of directors, a private placement in a public company requires approval by a company's shareholders in the following cases:

- A private placement that meets all of the following conditions:

  o 20 percent or more of the voting rights in the company prior to such issuance are being offered;

  o The private placement will increase the relative holdings of a shareholder that holds five percent or more of the company's outstanding share capital (assuming the exercise of all of the securities convertible into shares held by that person), or that will cause any person to become, as a result of the issuance, a holder of five percent or more of the company's outstanding share capital; and

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All or part of the consideration for the offering is not cash or registered securities, or the private placement is not being offered at market terms.

- A private placement which results in anyone becoming a controlling shareholder.

The above transactions must not be adverse to the company's interest.

Under the Companies Law, a shareholder has a duty to act in good faith towards the company and other shareholders and refrain from abusing his power in the company, including, among other things, vote in the general meeting of shareholders on the following matters:

- any amendment to the Articles;
- an increase of the company's authorized share capital;
- a merger; or
- approval of interested party transactions that require shareholder approval.

In addition, any controlling shareholder, any shareholder who knows that it possesses power to determine the outcome of a shareholder vote and any shareholder who has the power to appoint or prevent the appointment of an office holder in the company is under a duty to act with fairness towards the company. The Companies Law does not describe the substance of this duty, but provides that laws applicable to a breach of contract, adjusted according to the circumstances shall apply to a breach of such duties. With respect to the obligation to refrain from acting discriminatorily, a shareholder that is discriminated against can petition the court to instruct the company to remove or prevent the discrimination, as well as provide instructions with respect to future actions.

Tender Offer. A person wishing to acquire shares or any class of shares of a publicly traded Israeli company and who would as a result hold over 90% of the company's issued and outstanding share capital or of a class of shares, is required by the Companies Law to make a tender offer to all of the company's shareholders for the purchase of all of the issued and outstanding shares of the company. If the shares represented by the shareholders who did not tender their shares in the tender offer constitute less than 5% of the issued and outstanding share capital of the company, and (following the Amendment Date) more than half of the shareholders without a personal interest in accepting the offer tendered their shares, then all of the shares that the acquirer offered to purchase will be transferred to the acquirer by operation of law. If the dissenting shareholders hold more than 5% of the issued and outstanding share capital of the company, the acquirer may not acquire additional shares of the company from shareholders who accepted the tender offer to the extent that following such acquisition the acquirer would then own over 90% of the company's issued and outstanding share capital; provided, however, if the dissenting shareholders constitute less than 2% of the issued and outstanding share capital of the company then the full tender will be accepted and all of the shares that the acquirer offered to purchase will be transferred to the acquirer by operation of law. The Companies Law provides for an exception regarding this threshold requirement for a shareholder that on February 1, 2000 held over 90% of the public Israeli company's issued and outstanding share capital. Shareholders may petition the court to alter the consideration for the acquisition, provided, however, and subject to certain exceptions, the terms of the tender offer may state that a shareholder that accepts the offer waives such right.

The Companies Law provides that, subject to certain exceptions, an acquisition of shares of an Israeli public company must be made by means of a tender offer if as a result of the acquisition the purchaser would become a holder of 25% or more of the voting rights in the company. This rule does not apply if there is already another shareholder of the company that holds 25% or more of the voting rights in the company. Similarly, the Companies Law provides that, subject to certain exceptions, an acquisition of shares in a public company must be made by means of a tender offer if as a result of the acquisition the purchaser would become a holder of more than 45% of the voting rights in the company, if there is no shareholder that holds more than 45% of the voting rights in the company.

Merger. The Companies Law permits merger transactions if approved by each party's board of directors and the majority of each party's shares voted on the proposed merger at a shareholders' meeting called on at least 35 days prior notice. Under the Companies Law, merger transactions may be approved by holders of a simple majority of our shares present, in person or by proxy, at a general meeting and voting on the transaction. In determining whether the required majority has approved the merger, if shares of a company are held by the other party to the merger, or by any person holding at least 25% of the outstanding voting shares or 25% of the means of appointing directors of the other party to the merger, then a vote against the merger by holders of the majority of the shares present and voting, excluding shares held by the other party or by such person, or anyone acting on behalf of either of them, is sufficient to reject the merger transaction, provided, however, if the transaction is an extraordinary transaction with a controlling shareholder or in which a controlling shareholder has an interest, then the approvals required will be the corporate approvals under the Companies Law for such extraordinary transaction (i.e. approval of the audit committee, board of directors and shareholders vote, which shareholder approval must either include at least one-half of the shares held by disinterested shareholders who are present, in person or by proxy, at the meeting, or, alternatively, the total shareholdings of the disinterested shareholders who vote against the transaction must not represent more than two percent). If the transaction would have been approved but for the exclusion of the votes of certain shareholders as provided above, a court may still approve the merger upon the request of holders of at least 25% of the voting rights of a company, if the court holds that the merger is fair and reasonable, taking into account the value of the parties to the merger and the consideration offered to the shareholders. Upon the request of a creditor of either party to the proposed merger, the court may delay or prevent the merger if it concludes that there exists a reasonable concern that, as a result of the merger, the surviving company will be unable to satisfy the obligations of any of the parties to the merger. In addition, a merger may not be consummated unless at least 30 days have passed from the receipt of the shareholders' approval and 50 days have passed from the time that a merger proposal has been filed with the Israeli Registrar of Companies.

Companies Law Amendment

A recent amendment of the Companies Law, which came into effect gradually during 2011, made certain changes to the rules of corporate governance, which changes were incorporated into the above discussions of the Company. Additional changes to the Companies Law pursuant to the Amendment include:

- Code of Corporate Conduct. A code of recommended corporate governance practices has been attached to the Companies Law. In the explanatory notes to the legislation, the Knesset noted that an "adopt or disclose non-adoption" regulation would be issued by the Israeli Securities Authority with respect to such code. As of the date of this Annual Report, the Israeli Securities Authority has not issued any regulations yet with respect to this code, and it has not been determined to what extent this code will be relevant to Israeli companies that are also listed on non-Israeli stock exchanges.

- Fines. The Israeli Securities Authority shall be authorized to impose fines on any person or company performing a violation, in connection with a publicly traded company which reports to the Israeli Securities Authority, and specifically designated as a violation under the Companies Law.

Although we expect to be in compliance with the Companies Law, there is no assurance that we will not be required to adjust our current corporate governance practices, as discussed in this annual report, pursuant to the provisions of this amendment to the Companies Law.

The Israeli Securities Law- 1968 and the Securities Law Amendment

On February 27, 2011, an amendment to the Israeli Securities Law- 1968 (the “Israeli Securities Law”) came into effect (the “Securities Law Amendment”), which applies to Israeli public companies, including companies the securities of which are also listed on NASDAQ Stock Market. The main purpose of the Securities Law Amendment is creating an administrative enforcement procedure to be used by the Israeli Securities Authority ("ISA") to enhance the efficacy of enforcement in the securities market in Israel. The new administrative enforcement procedure may be applied to any company or person (including director, officer or shareholder of a company) performing any of the actions specifically designated as breaches of law under the Securities Law Amendment.

Furthermore, the Securities Law Amendment requires that the chief executive officer of a company supervise and take all reasonable measures to prevent the company or any of its employees from breaching the Israeli Securities Law. The chief executive officers is presumed to have fulfilled such supervisory duty if the company adopts internal enforcement procedures designed to prevent such breaches, appoints a representative to supervise the implementation of such procedures and takes measures to correct the breach and prevent its reoccurrence.

Under the Securities Law Amendment, a company cannot obtain insurance against or indemnify a third party (including its officers and/or employees) for any administrative procedure and/or monetary fine (other than for payment of damages to an injured party). The Securities Law Amendment permits insurance and/or indemnification for certain expenses related to an administrative procedure, such as reasonable legal fees, provided that it is permitted under the company's articles of association. In June 2011 each of our Audit Committee and Board of Directors approved a new form of Indemnification Agreement with our directors and officers so as to reflect this amendment, subject to approval of our shareholders to the relevant changes required to our Articles of Association. Our shareholders approved these amendments to the Articles of Association and a revised form of Indemnification Agreement for directors at the Annual General Meeting of the Shareholders held on August 11, 2011.

We continue to examine the implications of the Securities Law Amendment; however, its effect and consequences, as well as our scope of exposure, are yet to be entirely determined in practice. There is no assurance that we will not be required to take certain actions in order to enhance our compliance with the provisions of the Securities Law Amendment, such as adopting and implementing an internal enforcement plan to reduce our exposure to potential breaches of the Israeli Securities Law.

NASDAQ Marketplace Rules and Home Country Practices

As permitted by the NASDAQ Listing Rule 5615(a)(3)in lieu of certain corporate governance requirements we have chosen to follow the practices of our home country with respect to the following:

- We do not supply an annual report but make our audited financial statements available to our shareholders prior to our annual general meeting.

- The majority of our Board of Directors is not comprised of directors who meet the definition of independence contained in the NASDAQ Listing Rules. Under the Companies Law a majority of the Board of Directors is not required to be comprised of independent directors. In keeping with the requirements of the Companies Law two of the members of our Board of Directors are external directors, and are independent as defined under Rule 10A-3 of the Securities Act.

- Our Board has not adopted a policy of conducting regularly scheduled meetings at which only our independent directors are present. The Companies Law does not require our external directors to conduct regularly scheduled meetings at which only they are present.

- The compensation of our chief executive officer and all other executive officers is not determined, or recommended to the Board for determination, in the manner required by the NASDAQ Listing Rules. In accord with the Companies Law the compensation of the chief executive officer and all other officers requires the approval of our Audit Committee and Board of Directors, however the compensation of our chief executive officer, who also serves as a director, also requires the approval of our shareholders.

- Director nominees are not selected, or recommended for the Board's selection, as required by the NASDAQ Listing Rules. With the exception of our external directors, our directors are elected for terms of one year or until the following annual meeting, by a general meeting of our shareholders. The nominations for director which are presented to our shareholders are generally made by our board of directors. According to the Companies Law, one or more shareholders of a company holding at least one percent of the voting power of the company may nominate a currently serving external director for an additional three year term.

- Israeli law does not require the adoption of and our Board of Directors has not adopted a formal written charter or board resolution addressing the nomination process and such related matters as may be required under United States federal securities laws, as required by the NASDAQ Listing Rules.

- Although we have adopted a formal written audit committee charter, there is no requirement under the Companies Law to do so and the charter as adopted may not specify all the items enumerated in the NASDAQ Listing Rule 5605(c)(1).

- Our audit committee does not meet with all of the requirements of the NASDAQ Marketplace Rules, as permitted by the Companies Law though all members are independent as such term is defined under Rule 10A-3 of the Exchange Act.

- Under Israeli law a company is entitled to determine in its articles of association the number of shareholders and percentage of holdings required for a quorum at a shareholders meeting. Our articles of association do not provide for a quorum of not less than 33 1/3% of the outstanding shares of our voting ordinary shares for meetings of our ordinary shareholders, as required by the NASDAQ Listing Rules. Our articles of association presently require a quorum consisting of two shareholders holding a combined 33% of our ordinary shares.

- We review and approve all related party transactions in accordance with the requirements and procedures for approval of interested party acts and transactions, set forth in sections 268 to 275 the Companies Law, which do not fully reflect the requirements of the NASDAQ Listing Rules.

- We seek shareholder approval for all corporate action requiring such approval, in accordance with the requirements of the Companies Law, which does not fully reflect the requirements of the NASDAQ Listing Rules.

Material Contracts

For information regarding material contracts see Notes 3, 7, 10, 12, 13, 15, 16 and 17 to our consolidated financial statements for the year ended December 31, 2011 and the agreements described under the caption "Item 5. Operating and Financial Review and Prospects - B. Liquidity and Capital Resources".

75

Exchange Controls

Under Israeli law, non-residents of Israel who purchase ordinary shares with certain non-Israeli currencies (including US dollars) may freely repatriate in such non-Israeli currencies all amounts received in Israeli currency in respect of the ordinary shares, whether as a dividend, as a liquidating distribution, or as proceeds from any sale in Israel of the ordinary shares, provided in each case that any applicable Israeli income tax is paid or withheld on such amounts. The conversion into the non-Israeli currency must be made at the rate of exchange prevailing at the time of conversion.

Under Israeli law, both residents and non-residents of Israel may freely hold, vote and trade our ordinary shares.

Taxation

The below discussion does not purport to be an official interpretation of the tax law provisions mentioned therein or to be a comprehensive description of all tax law provisions which might apply to our securities or to reflect the views of the relevant tax authorities, and it is not meant to replace professional advice in these matters. The below discussion is based on current, applicable tax law, which may be changed by future legislation or reforms. Non-residents should obtain professional tax advice with respect to the tax consequences of holding or selling our securities under the laws of their countries of residence of holding or selling our securities.

Israeli Taxation

Until the end of the year 2002 and provided we maintained our status as an “Industrial Corporation”, capital gains from the sale of our securities were generally exempt from Israeli Capital Gains Tax. This exemption did not apply to a shareholder whose taxable income was determined pursuant to the Israeli Income Tax Law (Inflationary Adjustments) 1985, or to a person whose gains from selling or otherwise disposing of our securities were deemed to be business income.

On January 1, 2003 an amendment to the Israeli tax regime became effective. This was followed by new amendments made to the Israeli Income Tax Ordinance which were enacted in 2006 and lately in 2011 which have an effect for income derived as of 2012.

An individual is subject to a 25% tax rate on real capital gains derived from the sale of shares, as long as the individual is not a “substantial shareholder” (generally a shareholder with 10% or more of the right to profits, right to nominate a director or voting rights) in the company issuing the shares.

A substantial shareholder will be subject to tax at a rate of 30% in respect of real capital gains derived from the sale of shares issued by the company in which he or she is a substantial shareholder. The determination of whether the individual is a substantial shareholder will be made on the date that the securities are sold. In addition, the individual will be deemed to be a substantial shareholder if at any time during the 12 months preceding this date he or she had been a substantial shareholder.

However, capital gains derived from selling shares which were purchased before 2012 will be linearly split and the portion of the gains attributed to the period the shares were held prior to 2012 will be taxed for an individual at the older rate of 20% (and 25% for a substantial shareholder).

In 2011, corporations were subject to corporate tax with respect to total income, including capital gains, at the corporate tax rate of 24%. As of 2012 the corporate tax rate is 25%.

76

Non-Israeli residents are exempt from Israeli capital gains tax on any gains derived from the sale of shares in an Israeli corporation publicly traded on the TASE and/or on a foreign stock exchange, provided such gains do not derive from a permanent establishment of such shareholders in Israel and that such shareholders did not acquire their shares prior to the issuer's initial public offering. However, non-Israeli corporations will not be entitled to such exemption if an Israeli resident (i) has a controlling interest of 25% or more in such non-Israeli corporation, or (ii) is the beneficiary of or is entitled to 25% or more of the revenues or profits of such non-Israeli corporation, whether directly or indirectly.

In some instances where our shareholders may be liable to Israeli tax on the sale of their ordinary shares, the payment of the consideration may be subject to the withholding of Israeli tax at the source.

Pursuant to the treaty between the governments of the United States and Israel with respect to taxes on income, or the US-Israel tax treaty, the sale, exchange or disposition of our ordinary shares by a person who qualifies as a resident of the United States under the treaty and who is entitled to claim the benefits afforded to him by the treaty, will generally not be subject to Israeli capital gains tax. This exemption shall not apply to a person who held, directly or indirectly, shares representing 10% or more of the voting power in our company during any part of the 12-month period preceding the sale, exchange or disposition, subject to certain conditions. A sale, exchange or disposition of our shares by a US resident qualified under the treaty, who held, directly or indirectly, shares representing 10% or more of the voting power in our company at any time during the preceding 12-month period would be subject to Israeli tax, to the extent applicable and subject to other existing exemptions; however, under the treaty, this US resident would be permitted to claim a credit for these taxes against the US income tax with respect to the sale, exchange or disposition, subject to the limitations in US laws applicable to foreign tax credits.

Israeli Tax on Interest Income and on Original Issuance Discount

Interest and Original Issuance Discount (OID) on our debentures will, in general, be subject to Israeli tax of up to 25% if received by an individual. This reduced rate of tax will not apply if the interest and OID are business income in the hands of the recipient, if the interest is recorded or should be recorded in the individual's accounting books, if the recipient is a substantial shareholder of our company, if financing expenses related to the purchase of the debentures were deducted by the individual in the calculation of the individual's Israeli taxable income, or if the individual is an employee, supplier, or service provider of the company and the tax authorities have not been persuaded that the payment of interest was not affected by the relationship between the parties. In such cases the regular rate of tax on Interest and OID of up to a top marginal rate of 48% will apply to the individual in 2012. Interest and OID paid to corporations will be subject to corporate tax at the rate of 25% in 2012 (see above).

Beginning on January 1, 2009, interest, OID or inflation linkage differentials paid to a foreign resident which does not have a permanent establishment in Israel, on debentures issued by an Israeli corporation and which are traded on the TASE, are generally exempt from taxes. However, this exemption from taxes will not apply if the recipient is a substantial shareholder of the corporation, if the recipient is an affiliate of the issuer of the debentures, or if the individual is an employee, supplier, or service provider of the company and the tax authorities have not been persuaded that the Payment was not affected by the relationship between the parties. Where interest, OID or inflation linkage differentials are taxable in the hands of a non-Israeli resident tax will be withheld at source at a rate of 25%, unless a lower rate applies according to a relevant tax treaty.

Under regulations, withholding tax at source from debenture interest and OID paid to Israeli resident individuals will, in general, be at a rate of 25%. However, if the individual receiving the interest and OID is a substantial shareholder, an employee, supplier or service provider of the company, tax will be withheld at the top marginal rate applicable to individuals (48% in 2012). Corporations will be subject to withholding tax at a rate of 25%. In any event, under the US-Israel Tax Treaty, the maximum Israeli tax withheld on interest and OID paid on our debentures to a US treaty resident (other than a US bank, savings institution or company or with respect to payments attributed to a permanent establishment in Israel) is 17.5%.

Israeli Tax on Dividend Income

On distributions of dividends other than bonus shares, or stock dividends, to Israeli individuals and foreign resident individuals and foreign resident corporations we would be required to withhold income tax at the rate of 25%. If the income out of which the dividend is being paid is attributable to an Approved Enterprise under the Law for the Encouragement of Capital Investments, 1959, the rate is generally not more than 15%. A different rate may be provided for in a treaty between Israel and the shareholder's country of residence.

Under the US-Israel Tax Treaty, Israeli withholding tax on dividends paid to a US treaty resident may not, in general, exceed 25%, or 15% in the case of dividends paid out of the profits of an Approved Enterprise, subject to certain conditions. Where the recipient is a US corporation owning 10% or more of the voting stock of the paying corporation and the dividend is not paid from the profits of an Approved Enterprise, the Israeli tax withheld may not exceed 12.5%, subject to certain conditions.

Significant changes to the Investment Law

The Israeli Knesset approved significant changes to the Investment Law, which revamped the tax incentive regime in Israel and which became effective as of January 1, 2011. The main changes enacted are, inter alia, as follows:

- Industrial companies meeting the criteria set out by the Investment Law for a “Preferred Income” of a “Preferred Enterprise” (as defined below) will be eligible for flat tax rates of 10% or 15% for the years 2011 through 2012, 7% or 12.5% for years 2013 through 2014 and 6% or 12% for years 2015 onwards, with the actual tax rates determined by the location of the enterprise. The tax incentives offered by the Investment Law are no longer dependant neither on minimum qualified investments nor on foreign ownership.

- A company can enjoy both government grants and tax benefits concurrently. Governmental grants will not necessarily be dependent on the extent of enterprise’s investment in assets and/or equipment. Commencing 2011, the approval of “Preferred Enterprise” status by either the Israeli Tax Authorities or the Investment Center will be accepted by the other. Therefore a Preferred Enterprise will be eligible to receive both tax incentives and government grants, under certain conditions.

- Under the transition provisions, any tax benefits obtained prior to 2011 shall continue to apply until expired, unless the company elects to apply the provisions of the new provisions to its income.

“Preferred Income” is defined as income from the sale of products of the Preferred Enterprise (including components that were produced by other enterprises); income from the sale of semiconductors by other non related enterprises which use the Preferred Enterprise’s self-developed know-how; income for providing a right to use the Preferred Enterprise’s know how or software; royalties from the use of the know-how or software which was confirmed by the Head of The Investment Center to be related to the production activity of the Preferred Enterprise and services with respect to the aforementioned sales. In addition, the definition of “Preferred Income” also includes income from the provision of industrial R&D services to foreign residents to the extent that the services were approved by the Head of Research for the Industrial Development and Administration.

A "Preferred Enterprise" is defined as an Industrial Enterprise (including, inter alia, an enterprise which develops software, an enterprise which provides approved R&D services to foreign residents and an enterprise which the Chief Scientist confirmed is carrying out R&D in the field of alternative energy), which generally more than 25% of its business income is from export. As mentioned above, the new tax incentives no longer depend on minimum qualified investments nor on foreign ownership.

The Investment Law also determines the conditions and limitations applying to the tax benefits offered to a "Special Preferred Enterprise". A "Special Preferred Enterprise" will be able to enjoy corporate income tax rate in a rate of 5% if located in a preferred zone and 8% if not located in a preferred zone.

A "Special Preferred Enterprise" is defined as a Preferred Enterprise which meets one of the following conditions: (a) its Preferred Income is equal to or exceeds NIS 1.5 billion; (b) the total income of the company which owns the Preferred Enterprise or which operates in the same field of the Preferred Enterprise and which consolidates in its financial reports the company that owns the Preferred Enterprise equals or exceeds NIS 20 billions; or (c) its business plan was approved by the authorities as significantly benefitting the Israeli economy, either by an investment of at least NIS 400 - 800 million in assets; 100 -150 million NIS in R&D or the employment of at least 250 to 500 new employees, for preferred zones and regular zones, respectively.

Dividends paid out of income attributed to a Preferred Enterprise are generally subject to withholding tax at source at a rate of 15% or such lower rate as may be provided in an applicable tax treaty. However, if such dividends are paid to an Israeli company no tax will be withheld. Such an exemption may apply under the transition rules also to dividends distributed to an Israeli company by an Israeli company which owns a an Approved Enterprise or a Benefited Enterprise and which elected to convert to the new law until 30 June 2015 (in respect to their existing programs).

U.S. Federal Income Tax Considerations

The following discussion is a description of the material U.S. federal income tax considerations applicable to an investment in the ordinary shares by U.S. Holders who acquire our ordinary shares and hold them as capital assets for U.S. federal income tax purposes. As used in this section, the term "U.S. Holder" means a beneficial owner of an ordinary share who is:

- an individual citizen or resident of the United States;
- a corporation created or organized in or under the laws of the United States or of any state of the United States or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if the trust has elected validly to be treated as a United States person for U.S. federal income tax purposes or if a U.S. court is able to exercise primary supervision over the trust's administration and one or more United States persons have the authority to control all of the trust's substantial decisions.

The term "Non-U.S. Holder" means a beneficial owner of an ordinary share who is not a U.S. Holder. The tax consequences to a Non-U.S. Holder may differ substantially from the tax consequences to a U.S. Holder. Certain aspects of U.S. federal income tax relevant to a Non-U.S. Holder also are discussed below.

This description is based on provisions of the U.S. Internal Revenue Code of 1986, as amended, referred to in this discussion as the Code, existing and proposed U.S. Treasury regulations and administrative and judicial interpretations, each as available and in effect as of the date of this annual report. These sources may change, possibly with retroactive effect, and are open to differing interpretations. This description does not discuss all aspects of U.S. federal income taxation that may be applicable to investors in light of their particular circumstances or to investors who are subject to special treatment under U.S. federal income tax law, including:

- insurance companies;
- dealers in stocks, securities or currencies;
- financial institutions and financial services entities;
- real estate investment trusts;
- regulated investment companies;
- persons that receive ordinary shares as compensation for the performance of services;
- tax-exempt organizations;
- persons that hold ordinary shares as a position in a straddle or as part of a hedging, conversion or other integrated instrument;
- individual retirement and other tax-deferred accounts;
- expatriates of the United States;
- persons (other than Non-U.S. Holders) having a functional currency other than the U.S. dollar; and
- direct, indirect or constructive owners of 10% or more, by voting power or value, of us.

This discussion also does not consider the tax treatment of persons or partnerships that hold ordinary shares through a partnership or other pass-through entity or the possible application of United States federal gift or estate tax or alternative minimum tax.

We urge you to consult with your own tax advisor regarding the tax consequences of investing in the ordinary shares, including the effects of federal, state, local, foreign and other tax laws.

Distributions Paid on the Ordinary Shares

Subject to the discussion below under “PFIC Rules,” a U.S. Holder generally will be required to include in gross income as ordinary dividend income the amount of any distributions paid on the ordinary shares, including the amount of any Israeli taxes withheld, to the extent that those distributions are paid out of our current or accumulated earnings and profits as determined for U.S. federal income tax purposes. Subject to the discussion below under “PFIC Rules” distributions in excess of our earnings and profits will be applied against and will reduce the U.S. Holder’s tax basis in its ordinary shares and, to the extent they exceed that tax basis, will be treated as gain from a sale or exchange of those ordinary shares. Our dividends will not qualify for the dividends-received deduction applicable in some cases to U.S. corporations. Dividends paid in NIS, including the amount of any Israeli taxes withheld, will be includible in the income of a U.S. Holder in a U.S. dollar amount calculated by reference to the exchange rate in effect on the date they are included in income by the U.S. Holder, regardless of whether the payment in fact is converted into U.S. dollars. Any gain or loss resulting from currency exchange fluctuations during the period from the date the dividend is includible in the income of the U.S. Holder to the date that payment is converted into U.S. dollars generally will be treated as ordinary income or loss.

A non-corporate U.S. holder's "qualified dividend income" currently is subject to tax at reduced rates not exceeding 15%. For this purpose, "qualified dividend income" generally includes dividends paid by a foreign corporation if either:

(a) the stock of that corporation with respect to which the dividends are paid is readily tradable on an established securities market in the U.S., or

(b) that corporation is eligible for benefits of a comprehensive income tax treaty with the U.S. which includes an information exchange program and is determined to be satisfactory by the U.S. Secretary of the Treasury. The Internal Revenue Service has determined that the U.S.-Israel Tax Treaty is satisfactory for this purpose.

In addition, under current law a U.S. Holder must generally hold his ordinary shares for more than 60 days during the 121 day period beginning 60 days prior to the ex-dividend date, and meet other holding period requirements for qualified dividend income.

Dividends paid by a foreign corporation will not qualify for the reduced rates, if the dividend is paid in a tax year of the recipient beginning after December 31, 2002, unless such corporation is treated, for the tax year in which the dividend is paid or the preceding tax year, as a "passive foreign investment company" for U.S. federal income tax purposes. We do not believe that we will be classified as a "passive foreign investment company" for U.S. federal income tax purposes for our current taxable year. However, see the discussion under "PFIC Rules" below.

Subject to the discussion below under "Information Reporting and Back-up Withholding," a Non-U.S. Holder generally will not be subject to U.S. federal income or withholding tax on dividends received on ordinary shares unless that income is effectively connected with the conduct by that Non-U.S. Holder of a trade or business in the United States.

Foreign Tax Credit

Any dividend income resulting from distributions we pay to a U.S. Holder with respect to the ordinary shares generally will be treated as foreign source income for U.S. foreign tax credit purposes, which may be relevant in calculating such holder's foreign tax credit limitation. Subject to certain conditions and limitations, Israeli tax withheld on dividends may be deducted from taxable income or credited against a U.S. Holder's U.S. federal income tax liability. The limitation on foreign taxes eligible for credit is calculated separately with respect to specific classes of income. The rules relating to the determination of foreign source income and the foreign tax credit are complex, and the availability of a foreign tax credit depends on numerous factors. Each prospective purchaser who would be a U.S. Holder should consult with its own tax advisor to determine whether its income with respect to the ordinary shares would be foreign source income and whether and to what extent that purchaser would be entitled to the credit.

Disposition of Ordinary Shares

Upon the sale or other disposition of ordinary shares, subject to the discussion below under “PFIC Rules” a U.S. Holder generally will recognize capital gain or loss equal to the difference between the amount realized on the disposition and the holder’s adjusted tax basis in the ordinary shares. U.S. Holders should consult their own advisors with respect to the tax consequences of the receipt of a currency other than U.S. dollars upon such sale or other disposition.

In the event there is an Israeli income tax on gain from the disposition of ordinary shares, such tax should generally be the type of tax that is creditable for U.S. tax purposes; however, because it is likely that the source of any such gain would be a U.S. source, a U.S. foreign tax credit may not be available. U.S. shareholders should consult their own tax advisors regarding the ability to claim such credit.

Gain or loss upon the disposition of the ordinary shares will be treated as long-term if, at the time of the sale or disposition, the ordinary shares were held for more than one year. Long-term capital gains realized by non-corporate U.S. Holders are generally subject to a lower marginal U.S. federal income tax rate than ordinary income, other than qualified dividend income, as defined above. The deductibility of capital losses by a U.S. Holder is subject to limitations. In general, any gain or loss recognized by a U.S. Holder on the sale or other disposition of ordinary shares will be U.S. source income or loss for U.S. foreign tax credit purposes. U.S. Holders should consult their own tax advisors concerning the source of income for U.S. foreign tax credit purposes and the effect of the U.S.-Israel Tax Treaty on the source of income.

Subject to the discussion below under “Information Reporting and Back-up Withholding”, a Non-U.S. Holder generally will not be subject to U.S. federal income or withholding tax on any gain realized on the sale or exchange of ordinary shares unless:

- that gain is effectively connected with the conduct by the Non-U.S. Holder of a trade or business in the United States, or

- in the case of any gain realized by an individual Non-U.S. Holder, that holder is present in the United States for 183 days or more in the taxable year of the sale or exchange, and other conditions are met.

Information Reporting and Back-up Withholding

Holders generally will be subject to information reporting requirements with respect to dividends paid in the United States on ordinary shares. In addition, Holders will be subject to back-up withholding tax on dividends paid in the United States on ordinary shares unless the holder provides an IRS certification or otherwise establishes an exemption. Holders will be subject to information reporting and back-up withholding tax on proceeds paid within the United States from the disposition of ordinary shares unless the holder provides an IRS certification or otherwise establishes an exemption. Information reporting and back-up withholding may also apply to dividends and proceeds paid outside the United States that are paid by certain “U.S. payors” or “U.S. middlemen,” as defined in the applicable Treasury regulations, including:

(1) a U.S. person;

(2) the government of the U.S. or the government of any state or political subdivision of any state (or any agency or instrumentality of any of these governmental units);

(3) a controlled foreign corporation;

(4) a foreign partnership that is either engaged in a U.S. trade or business or whose Untied States partners in the aggregate hold more than 50% of the income or capital interests in the partnership;

(5) a foreign person that derives 50% or more of its gross income for certain periods from the conduct of a trade or business in the U.S.; or

(6) a U.S. branch of a foreign bank or insurance company.

The back-up withholding tax rate is 28%. Back-up withholding and information reporting will not apply to payments made to Non-U. S. Holders if they have provided the required certification that they are not United States persons.

In the case of payments by a payor or middleman to a foreign simple trust, foreign grantor trust or foreign partnership, other than payments to a holder that qualifies as a withholding foreign trust or a withholding foreign partnership within the meaning of the Treasury regulations and payments that are effectively connected with the conduct of a trade or business in the United States, the beneficiaries of the foreign simple trust, the person treated as the owner of the foreign grantor trust or the partners of the foreign partnership will be required to provide the certification discussed above in order to establish an exemption from backup withholding tax and information reporting requirements.

The amount of any back-up withholding may be allowed as a credit against a U.S. Holder’s U.S. federal income tax liability and may entitle the holder to a refund, provided that required information is furnished to the IRS.

PFIC Rules

A non-US corporation will be classified as a passive foreign investment company, or a PFIC, for US federal income tax purposes if either (i) 75% or more of its gross income for the taxable year is passive income, or (ii) on a quarterly average for the taxable year by value (or, if it is not a publicly traded corporation and so elects, by adjusted basis), 50% or more of its gross assets produce or are held for the production of passive income.

We do not believe that we satisfied either of the tests for PFIC status in 2011 or in any prior year. However, there can be no assurance that we will not be a PFIC in 2012 or a later year. If, for example, the “passive income” earned by us exceeds 75% or more of our “gross income”, we will be a PFIC under the “income test”. Passive income for PFIC purposes includes, among other things, gross interest, dividends, royalties, rent and annuities. For manufacturing businesses, gross income for PFIC purposes should be determined by reducing total sales by the cost of goods sold. Although not free from doubt, if our cost of goods sold exceeds our total sales by an amount greater than our passive income, such that we are treated as if we had no gross income for PFIC purposes, we believe that we would not be a PFIC as a result of the income test. However, the tests for determining PFIC status are applied annually and it is difficult to make accurate predictions of future income and assets, which are relevant to the determination of PFIC status.

If we were to be a PFIC at any time during a US holder’s holding period, such US holder would be required to either: (i) pay an interest charge together with tax calculated at maximum ordinary income tax rates on “excess distributions,” which is defined to include gain on a sale or other disposition of ordinary shares, or (ii) so long as the ordinary shares are “regularly traded” on a qualifying exchange, elect to recognize as ordinary income each year the excess in the fair market value, if any, of its ordinary shares at the end of the taxable year over such holder’s adjusted basis in such ordinary shares and, to the extent of prior inclusions of ordinary income, recognize ordinary loss for the decrease in value of such ordinary shares (the “mark to market” election). For this purpose, the NASDAQ Capital Market is a qualifying exchange. US holders are strongly urged to consult their own tax advisers regarding the possible application and consequences of the PFIC rules.

Documents on Display

We are required to file reports and other information with the SEC under the Securities Exchange Act of 1934 and the regulations thereunder applicable to foreign private issuers. Reports and other information filed by us with the SEC may be inspected and copied at the SEC's public reference facilities described below. Although as a foreign private issuer we are not required to file periodic information as frequently or as promptly as United States companies, we generally do publicly announce our quarterly and year-end results promptly and file periodic information with the SEC under cover of Form 6-K. As a foreign private issuer, we are also exempt from the rules under the Exchange Act prescribing the furnishing and content of proxy statements and our officers, directors and principal shareholders are exempt from the reporting and other provisions in Section 16 of the Exchange Act.

You may review and copy our filings with the SEC, including any exhibits and schedules, at the SEC's public reference room at 100 F Street N.E., Washington, D.C. 20549. You may call the SEC at 1-800-SEC-0330 for further information on this public reference room. As a foreign private issuer, all documents which were filed after November 4, 2002 on the SEC's EDGAR system will be available for retrieval on the SEC's website at www.sec.gov. These SEC filings are also available to the public on the Israel Securities Authority's Magna website at www.magna.isa.gov.il and from commercial document retrieval services. We also generally make available on our own web site (www.towerjazz.com) our quarterly and year-end financial statements as well as other information.

Any statement in this annual report about any of our contracts or other documents is not necessarily complete. If the contract or document is filed as an exhibit to a registration statement, the contract or document is deemed to modify the description contained in this annual report. We urge you to review the exhibits themselves for a complete description of the contract or document.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk is the risk of loss related to changes in market prices, including interest rates and foreign exchange rates, of financial instruments and derivatives that may adversely impact our consolidated financial position, results of operations or cash flows.

Our primary market risk exposures relate to interest rate movements on borrowings and fluctuations of the exchange rate of the US Dollar, which is the primary currency in which we conduct our operations, against the NIS, the Japanese Yen and the Euro. To manage those risks and mitigate our exposure to them, we use financial instruments from time to time, primarily, interest rate collar agreements (with a knock-out and knock-in features for certain agreements), and foreign currency forward contracts and options (including zero-cost cylinders).

All financial instruments are managed and controlled under a program of risk management in accordance with established policies. These policies are reviewed and approved by our board of directors. Our treasury operations are subject to an internal audit on a regular basis. We do not hold derivative financial instruments for speculative purposes, and we do not issue any derivative financial instruments for trading or speculative purposes.

Risk of Interest Rate Fluctuation

We have market risk exposure to changes in interest rates on our debt obligations with floating interest rates. We have entered into debt obligations to support our capital expenditures and needs. From time to time we enter into interest rate collar agreements to modify our exposure to interest rate movements and to reduce our borrowing costs. These agreements limit our exposure to the risks of fluctuating interest rates by allowing us to convert a portion of the interest on our borrowings from a variable rate to a limited variable rate.

We are subject to interest rate exposure in connection with $131 million debt outstanding as of March 31, 2012 under the Tower amended facility agreement, as such debt bears interest at a rate of the USD LIBOR plus 2.75% per annum and in connection with 17.5 million of Jazz's bank loans as such debt bears interest at a rate equal to, at the borrowers' option, either the lender's prime rate plus a margin ranging from 0.50% to 1.0% or the USD LIBOR rate (as defined in such loan agreement) plus a margin ranging from 2.25% to 2.75% per annum. The interest rate as of December 31, 2011 on approximately $116.3 million loans ranged from 3.1% to 3.4%. The $116.3 million includes $101 million loans under the Tower amended facility agreement not subject to the collar agreement and $15.3 million loans under the Jazz loan agreement. The interest rate of the additional $30 million loans covered by collar agreement was 5.55%, including the results of our hedging activities effective as of December 31, 2011. Following the amendments to the facility agreement, the loans under Tower's amended facility agreement are repayable in 9 consecutive quarterly installments between September 2013 and September 2015, totaling $25 million in 2013, $80 million in 2014 and $26 million in 2015. Subject to certain circumstances stipulated in the Banks' agreements, including following receipt by Tower of significant amounts of proceeds from certain sources, Tower is required to pay a portion of such proceeds on account of the outstanding loans prior to the periods specified.

During 2008 we entered into collar agreements in the amount of $120 million, effective June 2009 of which $30 million are outstanding as of December 31, 2011. These collar agreements will expire in June 2012. The terms of these collar agreements are as follows: if the USD LIBOR is below the floor level of 2.8% we will pay total interest at the fixed rate of 5.55% (the 2.8% floor rate plus 2.75% under the Tower amended facility agreement); if the USD LIBOR is between 2.8% and a range between 5.01% and 5.6%, we will pay total interest at the actual USD LIBOR plus 2.75%; if the USD LIBOR is higher than the range of 5.0% and 5.6%, we will pay total interest at a fixed rate of between 7.8% and 8.35% (the cap level plus 2.75%).

Our collar agreements resulted in a loss of $0.1 million in the year ended December 31, 2011. As of December 31, 2011, the fair value of these agreements was a $0.3 million unrealized loss.

Under current terms of Tower's loans and the collar agreements and Jazz's loans, we have determined that an assumed 10% upward shift in the USD LIBOR rate at December 31, 2011 (from 0.63% to 0.69%), will not have a material effect on our yearly interest payments in 2012. Each 10% upward shift in the USD LIBOR rate in the range between the floor level and the cap level, (from 4.5% to 4.95%, for example), will also not have a material effect on our yearly interest payments in 2012.

Our cash equivalents and interest-bearing deposits are exposed to market risk due to fluctuation in interest rates, which may affect our interest income and the fair market value of our investments. We manage this exposure by performing ongoing evaluations of our investments in those deposits. Due to the short maturities of our investments, their carrying value approximates their fair value.

Foreign Exchange Risk

We are exposed to the risk of fluctuation in the NIS/US dollar exchange rate with respect to Tower's debentures issued in 2007. As of December 31, 2011 the adjusted outstanding principal amount of these debentures was $57 million. The dollar amount of our financing costs (interest and currency adjustments) related to these debentures will be increased if the rate of inflation in Israel is not offset by the devaluation of the NIS in relation to the dollar. In addition, the dollar amount of any repayment on account of the principal of these debentures will be increased as well. If the devaluation of the NIS against the dollar is greater than the rate of inflation in Israel, the dollar amounts we may raise on the date of exercising our NIS denominated options linked to the CPI will be decreased.

From the date of the issuance of the 2007 debentures in the second half of 2007 until December 31, 2011, the Israel consumer price index increased by approximately 17% while the US dollar/NIS exchange rate decreased by approximately 11%, resulting in a 6% net effect on the US dollar liability amount.

The debentures issued in 2010, as were expanded in 2012, are fully linked to the USD, bear annual interest at the rate of 7.8%, and are due in two equal installments in December 2015 and December 2016. The New Notes issued by Jazz in 2010 are denominated in USD, bear interest at a rate of 8% per annum payable twice a year, maturing in June 2015.

Therefore, we are not subject to cash flow exposure to interest rate fluctuations with respect to the debentures or notes. However, in the event that the actual market interest rates are lower than the interest rate provided under the debentures or notes, our actual finance costs would be higher than they otherwise could have been had our debentures or notes provided for interest at a floating interest rate.

Our main foreign currency exposures other than debentures are associated with exchange rate movements of the US dollar, our functional and reporting currency, against the NIS, Japanese Yen and the Euro. To protect against reductions in value and the volatility of future cash flows caused by changes in foreign exchange rates, we utilize foreign currency forward contracts and options (including zero-cost cylinder options) in order to minimize part of the impact of foreign currency fluctuations on our financial position and results of operations. A cylinder option is a combination of a purchased call option and a written put option. The exercise prices of the options may not be identical and this effectively creates a synthetic range forward. The maturity dates of the options coincide with the scheduled payments.

In order to mitigate our exposure to the risk of fluctuations in the NIS/US dollar exchange rate with respect to our NIS denominated expenses, mainly payroll, Tower entered into option transactions. As of December 31, 2011 Tower had $12 million open exchange rate agreements which will expire throughout 2012. The profit from these transactions for the year ended December 31, 2011 was recorded in the statements of operations. We are exposed to currency risk in the event of default by the other parties of the exchange transaction. We estimate the likelihood of such default to occur is remote, as the other parties are widely recognized and reputable Israeli banks.

Assuming a 10% revaluation of the NIS against the US dollar on December 31, 2011 (from 3.82 to 3.44), the effective fair value of our liabilities net of assets denominated in NIS (mainly vendors, debentures and liabilities in regard to employees) would be higher by approximately $7 million.

Impact of Inflation

We believe that the rate of inflation in Israel has had a minor effect on our business to date. However, our dollar costs in Israel will increase if inflation in Israel exceeds the devaluation of the NIS against the US dollar.

Risks Related to Obligations Indexed to our Own Securities.

Under GAAP, certain of our obligations (including warrants to issue shares), convertible into our ordinary shares, are not part of our shareholders' equity and are either carried at fair value in its entirety or its equity component is carried at fair value. The effect of carrying such obligations at fair value is that the value of the obligations increases as our share price increases. This may increase significantly our non-cash financing expenses, which may cause our potential gross and operating profits to result in a net loss or may increase our net loss or reduce our net profits; This non-cash appreciation in our obligations and financing expenses will either eventually be reversed or be converted into equity, or a combination thereto.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

Not applicable.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Not applicable.

ITEM 15. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the "Act") as of the end of the period covered by this annual report on Form 20-F. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that these disclosure controls and procedures were effective as of such date, at a reasonable level of assurance, in ensuring that the information required to be disclosed by our company in the reports we file or submit under the Act is (i) accumulated and communicated to our management (including the Chief Executive Officer and Chief Financial Officer) in a timely manner, and (ii) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the criteria in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation, management has concluded that our internal control over financial reporting was effective as of December 31, 2011.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Attestation Report of the Registered Public Accounting Firm.

The effectiveness of our internal control over financial reporting as of December 31, 2011 has been audited by Brightman Almagor Zohar & Co., a member firm of Deloitte Touche Tohmatsu, an independent registered public accounting firm, as stated in their report which appears herein.

ITEM 16. [RESERVED]

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that a member of our audit committee, Mr. Ilan Flato, is an audit committee financial expert under applicable SEC rules and is independent as defined by NASDAQ Marketplace Rules.

ITEM 16B. CODE OF ETHICS

We adopted a code of ethics that applies to all of our directors, officers and employees, including our Chief Executive Officer, Chief Financial Officer, controller, and persons performing similar functions. We have posted our code of ethics on our website, www.towerjazz.com under "About Tower".

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table presents payments fees for professional services rendered by our independent registered public accounting firm for audit services, audit-related services and for tax services:

	2011	2010
	(US Dollars In Thousands)	
Audit fees (1)	504	565
Audit Related Fees (2)	138	86
Tax fees (3)	86	26
	728	677

(1) Audit fees consist of fees for professional services rendered for the audit of our financial statements, services in connection with statutory and regulatory filings and engagements (including review of Forms 20-F, 10-K, 10-Q, F-1, F-3, F-4, 6-k and S-8 and SOX), and reviews of our unaudited interim consolidated financial statements included in our quarterly reports.

(2) Audit-related fees consist of assurance and related services that traditionally are performed by the independent accountant. These services include, among others: due diligence services, accounting consultations and audits in connection with acquisitions, internal control reviews, attest services related to financial reporting that are not required by statute or regulation and consultation concerning financial accounting and reporting standards.

(3) Tax fees consist of fees for tax compliance services.

Our audit committee's charter states that the audit committee is responsible for receiving specific information on the independent auditor's proposed services and for pre-approving all audit services annually and separately approving any other permitted non-audit related services. All of the non-audit services provided in 2010 and 2009 were pre-approved without reliance on the Waiver Provisions in paragraph (c)(7)(i)(C)of Regulation S-X.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES.

Not Applicable.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS.

Not Applicable.

ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

As a foreign private issuer whose shares are listed on NASDAQ Capital Market, we are permitted to follow certain home country corporate governance practices instead of certain requirements of the NASDAQ Marketplace Rules. See Item 10.B “Additional Information – NASDAQ Marketplace Rules and Home Country Practices” for a detailed description of the significant ways in which the registrant’s corporate governance practices differ from those followed by U.S. companies under the listing standards of the NASDAQ Capital Market.

PART III

ITEM 17. FINANCIAL STATEMENTS

Not applicable.

ITEM 18. FINANCIAL STATEMENTS

See Index to Financial Statements following the signature page.

ITEM 19. EXHIBITS

1.1 Articles of Association of the Registrant, approved by shareholders on November 14, 2000, as amended (incorporated by reference to Exhibit 3.1 of the Registrant's Registration Statement on Form F-1, File No. 333-126909, "Form F-1 No. 333-126909").

1.2 Amendment to Articles of Association of the Registrant (incorporated by reference to exhibit 4.2 to the Registration Statement on Form S-8 No. 333-117565 ("Form S-8 No. 333-117565").

1.3 Amendment to the Articles of Association of the Registrant (approved by shareholders on September 28, 2006) (incorporated by reference to Exhibit 4.2 of the Registrant's Registration Statement on Form S-8, File No. 333-138837 (the "2006 Form S-8").

1.4 Amendment to Articles of Association of Registrant (approved by shareholders on September 24, 2008) (incorporated by reference to Exhibit 3.4 of the Registrant's Registration Statement on Form S-8, File No. 333-153710 (the "2008 Form S-8").

1.5 Amendment to Articles of Association of Registrant (approved by shareholders on August 11, 2011) (incorporated by reference to exhibit 99.1 of the Form 6-K furnished to the SEC on January 17, 2012) (the "2011 Proxy statement").

2.1 Registration Rights Agreement, dated January 18, 2001, by and between SanDisk Corporation, Israel Corporation, Alliance Semiconductor Ltd. and Macronix International Co., Ltd. (incorporated by reference to exhibit 2.2 to the 2000 Form 20-F).

2.2 Form of Indenture (incorporated by reference to exhibit 4.2 to the Registrant's Amendment No. 6 to the Registration Statement on Form F-1/A No. 333-126909 (the "Form F-1 No. 333-126909").

2.3 Form of Series I Warrant (incorporated by reference to exhibit 99.6 of the March 2007 Form 6-K).

3.1 Consolidated Shareholders Agreement, dated January 18, 2001, by and between SanDisk Corporation, Israel Corporation, Alliance Semiconductor Ltd. and Macronix International Co., Ltd. (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.1 Registrant's Non-Employee Director Share Option Plan 2000/3 (incorporated by reference to exhibit 4.5 to the Registrant's Registration Statement on Form S-8 No. 333-83204 ("Form S-8 No. 333-83204")).

4.2 Form of Grant Letter for Non-Employee Directors Share Option Plan 2001/4 (incorporated by reference to exhibit 4.9 to the Form S-8 No. 333-83204).

4.3 Form of Grant Letter for Non-Employee Directors Share Option Plan 2001/5 (incorporated by reference to exhibit 4.10 to the Form S-8 No. 333-83204).

4.4 Investment Center Agreement related to Fab 1, dated November 13, 2001 (English translation of Hebrew original) (incorporated by reference to exhibit 10.2 to the Registrant's Registration Statement on Form F-2, No. 333-97043).

4.5 Employee Share Option Plan 2004 (incorporated by reference to Exhibit 4.3 to the Registrant's Registration Statement on Form S-8 No. 333-117565 ("Form S-8 No. 333-117565").

4.6 Form of Grant Letter to Israeli Employees (incorporated by reference to Exhibit 4.4 to Form S-8 No. 333-117565).

4.7 Form of Grant Letter to US Employees (incorporated by reference to Exhibit 4.5 to Form S-8 No. 333-117565).

4.8 Employee Share Option Plan 2005, as amended (incorporated by reference to Exhibit 4.1 of the 2008 Form S-8).

4.9 Form of Grant Letter to Israeli Employees (incorporated by reference to Exhibit 4.4 of the 2006 Form S-8).

4.10 Form of Grant Letter to US Employees (incorporated by reference to Exhibit 4.5 of the 2006 Form S-8).

4.11 Form of Grant Letter for grants to Jazz employees under the Employee Share Option Plan 2005 (incorporated by reference to Exhibit 4.4 of the 2008 Form S-8).

4.12 Jazz Technologies, Inc. 2006 Equity Incentive (incorporated by reference to Exhibit 4.5 of the 2008 Form S-8)

4.13 Form of Assumption Letter from the Registrant to holders of Jazz Technologies, Inc. 2006 Equity Incentive Plan options (incorporated by reference to Exhibit 4.6 of the 2008 Form S-8)

4.14 Form of Option Agreement under the Jazz Technologies, Inc. 2006 Equity Incentive Plan (incorporated by reference to Exhibit 4.7 of the 2008 Form S-8)

4.15 CEO Share Option Plan 2005 (incorporated by reference to Exhibit 4.6 of the 2006 Form S-8).

4.16 Option Grant Letter Agreement - CEO Share Option Plan 2005 from the Registrant to our CEO, dated July 15, 2005 (incorporated by reference to Exhibit 4.7 of the 2006 Form S-8).

4.17 Option Grant Letter Agreement - CEO Share Option Plan 2005 from the Registrant to our CEO, dated September 28, 2006 (incorporated by reference to Exhibit 4.8 of the 2006 Form S-8).

4.18 Option Grant Letter Agreement - CEO Share Option Plan 2005 from Tower Semiconductor USA, Inc. to our CEO, dated July 15, 2005 (incorporated by reference to Exhibit 4.9 of the 2006 Form S-8).

4.19 Equity Convertible Capital Note, dated September 28, 2006, issued to Israel Corporation Ltd. (incorporated by reference to Exhibit 99.4 of the Form 6-K for the month of November 2006 No. 6 filed on November 7, 2006 (the "November 2006 Form 6-K")).

4.20 2009 Chairman Share Incentive Plan (incorporated by reference to Exhibit 4.20 to the 2010 20-F).

4.21 Registration Rights Agreement, dated September 28, 2006, with Israel Corporation Ltd. (incorporated by reference to Exhibit 99.5 of the November 2006 Form 6-K).

4.22 Conversion Agreement, dated September 28, 2006, with Bank Hapoalim B.M. (incorporated by reference to Exhibit 99.8 of the November 2006 Form 6-K).

4.23 Conversion Agreement, dated September 28, 2006, with Bank Leumi Le-Israel B.M. (incorporated by reference to Exhibit 99.9 of the November 2006 Form 6-K).

4.24 Registration Rights Agreement, dated September 28, 2006, with Bank Hapoalim B.M. (incorporated by reference to Exhibit 99.10 of the November 2006 Form 6-K).

4.25 Registration Rights Agreement, dated September 28, 2006, with Bank Leumi Le-Israel B.M. (incorporated by reference to Exhibit 99.11 of the November 2006 Form 6-K).

4.26 Equity Convertible Capital Note, dated September 28, 2006, issued to Bank Hapoalim B.M. (incorporated by reference to Exhibit 99.12 of the November 2006 Form 6-K).

4.27 Equity Convertible Capital Note, dated September 28, 2006, issued to Bank Leumi Le-Israel B.M. (incorporated by reference to Exhibit 99.13 of the November 2006 Form 6-K).

4.28 Form of Securities Purchase Agreement (incorporated by reference to Exhibit 99.2 of the Form 6-K for the month of March 2007 No.1 filed on March 15, 2007 (the "March 2007 Form 6-K")).

92

4.29 Form of Registration Rights Agreement (incorporated by reference to Exhibit 99.4 of the March 2007 Form 6-K).

4.30 Agreement and Plan of Merger and Reorganization, dated May 19, 2008, between the Registrant, Jazz Technologies, Inc. and Armstrong Acquisition Corp. (incorporated by reference to Exhibit 2.1 of the May 20, 2008 Form 6-K)

4.31 Facility Agreement, as amended and restated by the parties through September 29, 2008. (incorporated by reference to Exhibit 4.86 to the 2008 20-F)

4.32 Conversion Agreement, dated September 25, 2008, with Bank Hapoalim B.M. (incorporated by reference to Exhibit 4.87 to the 2008 20-F)

4.33 Conversion Agreement, dated September 25, 2008, with Bank Leumi Le-Israel B.M. (incorporated by reference to Exhibit 4.88 to the 2008 20-F)

4.34 Conversion Agreement, dated September 25, 2008, with the Israel Corporation Ltd. (incorporated by reference to Exhibit 4.89 to the 200820-F)

4.35 Pledge Agreement, dated September 25, 2008, with Bank Hapoalim B.M. and Bank Leumi Le-Israel B.M. (incorporated by reference to Exhibit 4.90 to the 2008 20-F)

4.36 Amended and Restated Registration Rights Agreement, dated September 25, 2008, with Bank Hapoalim B.M. (incorporated by reference to Exhibit 4.91 to the 2008 20-F)

4.37 Amended and Restated Registration Rights Agreement, dated September 25, 2008, with Bank Leumi Le-Israel B.M. (incorporated by reference to Exhibit 4.92 to the 2008 20-F)

4.38 Undertaking by Israel Corporation Ltd., dated September 25, 2008. (incorporated by reference to Exhibit 4.93 to the 2008 20-F)

4.39 Securities Purchase Agreement, dated September 25, 2008, with the Israel Corporation Ltd. (incorporated by reference to Exhibit 4.94 to the 2008 20-F)

4. 40 Equity Convertible Capital Note, dated September 29, 2008, issued to Bank Hapoalim B.M. (incorporated by reference to Exhibit 4.95 to the 2008 20-F)

4.41 Equity Convertible Capital Note, dated September 29, 2008, issued to Bank Leumi Le-Israel B.M. (incorporated by reference to Exhibit 4.96 to the 2008 20-F)

4. 42 Equity Convertible Capital Note, in the principal amount of $30 million, dated September 25, 2008, issued to the Israel Corporation Ltd. in connection with the conversion of debt. (incorporated by reference to Exhibit 4.97 to the 2008 20-F)

4. 43 Equity Convertible Capital Note, in the principal amount of $20 million, dated September 25, 2008, issued to the Israel Corporation Ltd. in connection with the conversion of debt. (incorporated by reference to Exhibit 4.98 to the 2008 20-F)

4. 44 Equity Convertible Capital Note, in the principal amount of $20 million, dated September 25, 2008, issued to the Israel Corporation Ltd. in connection with the investment. (incorporated by reference to Exhibit 4.99 to the 2008 20-F)

93

4.45 Equity Convertible Capital Note, in the principal amount of $20 million, dated January 7, 2008, issued to the Israel Corporation Ltd. in connection with the investment. (incorporated by reference to Exhibit 4.100 to the 2008 20-F)

4.46 Amended and Restated Registration Rights Agreement, dated September 25, 2008, with the Israel Corporation Ltd. (incorporated by reference to Exhibit 4.101 to the 2008 20-F).

4.47 Amendment to Undertaking by the Israel Corporation Ltd., dated January 6, 2009 (incorporated by reference to Exhibit 4.102 to the 2008 20-F).

4.48 Standby Equity Purchase Agreement between Tower and YA Global Master SPV Ltd., dated August 11, 2009, Amendment No. 1 dated August 27, 2009 and Amendment No. 2 dated February 4, 2010 (incorporated by reference to Exhibits 99.1, 99.2 and 99.3, respectively, of the February 5, 2010 Form 6-K).

4.49 Amendment No. 3 to Standby Equity Purchase Agreement between Tower and YA Global Master SPV Ltd., dated August 11, 2009 (incorporated by reference to Exhibit 99.1 to the April 23, 2010 6-K).

4.50 Amendment No. 4 to Standby Equity Purchase Agreement between Tower and YA Global Master SPV Ltd., dated November 15, 2010 (incorporated by reference to Exhibit 99.1 to the December 12, 2010 6-K)

4.51 Amendment No. 5 to Standby Equity Purchase Agreement between Tower and YA Global Master SPV Ltd., dated April 8, 2011 (incorporated by reference to Exhibit 99.1 to the April 28, 2011 6-K).

4.52 Exchange Agreement dated July 9, 2010 by and among Jazz Technologies, Inc., Tower Semiconductor, Ltd., Jazz Semiconductor, Inc., Newport Fab, LLC, Zazove Associates, LLC and certain holders of the Registrant's 8% Senior Notes due 2011 (incorporated by reference to Exhibit 10.48 to Jazz Technologies' Quarterly Report on Form 10-Q for the quarter ended June 30, 2010).

4.53 Indenture dated July 15, 2010 by and among Jazz Technologies, Jazz Semiconductor, Inc., Newport Fab, LLC and U.S. Bank National Association (incorporated by reference to Exhibit 4.15 to Jazz Technologies' Quarterly Report on Form 10-Q for the quarter ended June 30, 2010).

4.54 Warrant Agreement dated July 15, 2010 between Tower Semiconductor, Ltd. and American Stock Transfer & Trust Company, LLC as warrant agent (incorporated by reference to Exhibit 4.54 to 2010 20-F).

4.55 Form of Series J Warrant (incorporated by reference to Exhibit 4.55 to 2010 20-F).

4.56 Master Agreement by and among Micron Technology, Inc., Micron Japan, Ltd. and Tower Semiconductor Ltd. dated May 25, 2011 (incorporated by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form F-3 (No. 333-178166)).

4.57 Credit Support and Subordination Agreement, by and among Micron Technology, Inc., Micron Japan, Ltd., Tower Semiconductor Ltd., TowerJazz Japan, Ltd., and TowerJazz Japan, Ltd. dated June 3, 2011 (incorporated by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form F-3 (No. 333-178166)).

4.58 Shareholder Rights and Restrictions Agreement between Micron Technology, Inc. and Tower Semiconductor Ltd. dated June 3, 2011 (incorporated by reference to Exhibit 10.3 to the Registrant's Registration Statement on Form F-3 (No. 333-178166)).

#8.1 List of Subsidiaries.

#12.1 Certification by Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

#12.2 Certification by Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

#13.1 Certification by Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

#13.2 Certification by Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

#15.1 Consent of Brightman Almagor Zohar & Co., Certified Public Accountants, a member of Deloitte Touche Tohmatsu.

#101 The following financial information from Tower Semiconductor Ltd.'s Annual Report on Form 20-F for the year ended December 31, 2011, formatted in XBRL (eXtensible Business Reporting Language):

(i) Consolidated Balance Sheets at December 31, 2011 and 2010;

(ii) Consolidated Statements of Operations for the years ended December 31, 2011, 2010 and 2009;

(iii) Consolidated Statements of Changes in Shareholders' Equity for the years ended December 31, 2011, 2010 and 2009;

(iv) Consolidated Statements of Cash Flows for the years ended December 31, 2011, 2010 and 2009; and

(v) Notes to Consolidated Financial Statements, tagged as blocks of text.

Users of this data are advised, in accordance with Rule 406T of Regulation S-T promulgated by the SEC, that this Interactive Data File is deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of Section 18 of the Exchange Act, and otherwise is not subject to liability under these sections.

#Filed herewith

SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant hereby certifies that it meets all the requirements for filing on Form 20-F and has duly caused and authorized the undersigned to sign this Annual Report to be signed on its behalf.

TOWER SEMICONDUCTOR LTD.

By: /s/ Russell C. Ellwanger
Russell C. Ellwanger
Chief Executive Officer

April 30, 2012

TOWER SEMICONDUCTOR LTD.
AND SUBSIDIARIES
CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2011

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and the shareholders of
Tower Semiconductor Ltd.

We have audited the accompanying consolidated balance sheets of Tower Semiconductor Ltd. and subsidiaries ("the Company") as of December 31, 2011 and 2010, and the related consolidated statements of operations, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2011. These financial statements are the responsibility of the Company's Board of Directors and management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Tower Semiconductor Ltd. and subsidiaries as of December 31, 2011 and 2010, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2011, in conformity with accounting principles generally accepted in United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated February 15, 2012 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Brightman Almagor Zohar & Co.
Certified Public Accountants
A Member Firm of Deloitte Touche Tohmatsu

Tel Aviv, Israel
February 15, 2012

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To Board of Directors and the shareholders of
Tower Semiconductor Ltd.

We have audited the internal control over financial reporting of Tower Semiconductor Ltd. and subsidiaries (the "Company") as of December 31, 2011, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's Board of Directors and management are responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in ITEM 15 CONTROLS AND PROCEDURES - INTERNAL CONTROL OVER FINANCIAL REPORTING. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on the criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2011 of the Company and our report dated February 15, 2012 expressed an unqualified opinion on those financial statements.

Brightman Almagor Zohar & Co.
Certified Public Accountants
A Member Firm of Deloitte Touche Tohmatsu

Tel Aviv, Israel
February 15, 2012

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(dollars in thousands)

	As of December 31, 2011	As of December 31, 2010
A S S E T S		
CURRENT ASSETS		
Cash and cash equivalents	$101,149	$100,375
Interest bearing deposits, including designated deposits	--	98,007
Trade accounts receivable	75,350	67,415
Other receivables	5,000	5,344
Inventories	69,024	42,512
Other current assets	15,567	8,422
Total current assets	266,090	322,075
LONG-TERM INVESTMENTS	12,644	31,051
PROPERTY AND EQUIPMENT, NET	498,683	375,325
INTANGIBLE ASSETS, NET	58,737	54,247
GOODWILL	7,000	7,000
OTHER ASSETS, NET	14,067	12,030
TOTAL ASSETS	$857,221	$801,728
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES		
Short-term bank debt and current maturities of debentures	$48,255	$122,179
Trade accounts payable	111,620	48,656
Deferred revenue and short-term customers' advances	5,731	40,273
Other current liabilities	64,654	38,914
Total current liabilities	230,260	250,022
LONG-TERM LOANS FROM BANKS	103,845	111,882
DEBENTURES	197,765	247,598
LONG-TERM CUSTOMERS' ADVANCES	7,941	9,257
EMPLOYEE RELATED LIABILITIES	97,927	27,891
DEFERRED TAX LIABILITY	20,428	9,876

OTHER LONG-TERM LIABILITIES	24,352	27,420
Total liabilities	682,518	683,946
SHAREHOLDERS' EQUITY	174,703	117,782
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$857,221	$801,728

See notes to consolidated financial statements.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(dollars in thousands, except per share data)

	Year ended December 31, 2011	2010	2009
REVENUES	$611,023	$509,262	$298,812
COST OF REVENUES	526,198	402,077	325,310
GROSS PROFIT (LOSS)	84,825	107,185	(26,498)
OPERATING COSTS AND EXPENSES			
Research and development	24,886	23,876	23,375
Marketing, general and administrative	48,239	39,986	31,943
Acquisition related costs	1,493	--	--
	74,618	63,862	55,318
OPERATING PROFIT (LOSS)	10,207	43,323	(81,816)
FINANCING EXPENSE, NET	(40,302)	(72,925)	(45,710)
GAIN FROM ACQUISITION	19,467	--	--
OTHER INCOME, NET	13,460	65	2,045
PROFIT (LOSS) BEFORE INCOME TAX	2,832	(29,537)	(125,481)
INCOME TAX BENEFIT (EXPENSE)	(21,362)	(12,830)	5,022
LOSS FOR THE PERIOD	(18,530)	$(42,367)	$(120,459)
BASIC LOSS PER ORDINARY SHARE			
Loss per share	$(0.06)	$(0.18)	$(0.71)
Weighted average number of ordinary shares outstanding - in thousands	302,065	235,320	170,460

See notes to consolidated financial statements.

TOWER SEMICONDUCTOR LTD.
STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(dollars in thousands)

	Ordinary shares									
	Shares-in thousands	Amount	Additional paid-in capital	Capital notes	Treasury stock	Accumulated Other comprehensive income (loss)	Foreign currency translation adjustments	Accumulated deficit	Comprehensive income (loss)	Total
BALANCE - JANUARY 1, 2009	161,326	$39,929	$693,390	$291,472	$(9,072)	$(2,367)	--	$(901,785)		$111,567
Issuance of shares and warrants	36,114	9,572	24,534							34,106
Conversion of convertible debentures to shares	2,796	744	3,357							4,101
Employee stock-based compensation			2,841							2,841
Exercise of options	25	6	15							21
Stock-based compensation, Note 17B(5)			3,829							3,829
Reclassification of options and warrants			(13,661)					12,800		(861)
Capital notes				20,000						20,000
Other comprehensive income						869			869	869
Loss for the year								(120,459)	(120,459)	(120,459)
Comprehensive loss									(119,590)	