

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, 2002 COMMISSION FILE NO. 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)

P.O. BOX 619, MIGDAL HAEMEK, ISRAEL 23105
(Address of principal executive offices)

SECURITIES REGISTERED OR TO BE REGISTERED PURSUANT TO SECTION 12(B) OF THE ACT:

None

SECURITIES REGISTERED OR TO BE REGISTERED PURSUANT TO SECTION 12(G) OF THE ACT:

ORDINARY SHARES, PAR VALUE NEW ISRAELI SHEKELS 1.00 PER SHARE

(Title of Class)
Warrants
(Title of Class)

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:

43,435,532 Ordinary Shares.

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 No

Indicate by check mark which financial statement item the registrant has
elected to follow:

Item 17 Item 18

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 of
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. Risk
Factors."

We have prepared our consolidated financial statements in United States
dollars and in accordance with accounting principles generally accepted in
Israel ("Israeli GAAP"). As applicable to our consolidated financial statements
for all fiscal periods for which financial data is presented herein, such
accounting principles are substantially identical in all material respects to
accounting principles generally accepted in the United States ("U.S. GAAP"),
except as indicated in Note 20 to our consolidated financial statements included
herein. All references herein to "dollars" or "\$" are to United States dollars,
and all references to "Shekels" or "NIS" are to New Israeli Shekels.

Manufacturing capacity 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 start 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 mix for such period.
Unless otherwise specifically stated, all references herein to "wafers" in the
context of capacity in Fab 1 are to 150-mm wafers and in Fab 2 are to 200-mm
wafers.

References to "Israel Corporation" or "Israel Corp." include its wholly-owned subsidiary Israel Corporation Technologies (ICTech) Ltd. ("ICTech").

MICROFLASH(R) is a registered trademark of Tower and N-ROM(TM) is a trademark of Saifun Semiconductor Ltd.

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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

The selected financial data is incorporated by reference to Item 5 of this annual report.

RISK FACTORS

This annual report and statements that we may make from time to time may contain forward-looking information. There can be no assurance that actual results will not differ materially from our expectations, statements or projections. Factors that could cause actual results to differ from our expectations, statements or projections include the risks and uncertainties relating to our business described below.

SPECIFIC RISKS RELATED TO THE FAB 2 PROJECT

In addition to the risks and uncertainties that may affect our business generally as described below, our plans to construct and complete Fab 2 are subject to risks and uncertainties, including those discussed below.

WE WILL NEED TO SATISFY THE FINANCIAL COVENANTS SET FORTH IN OUR CREDIT FACILITY AGREEMENT. Our Fab 2 credit facility agreement, as currently in effect, requires us to continue to raise minimum amounts from specified financial sources as follows: \$110 million by the end of December 2002 (of which we have raised \$86.2 million to date) and an additional \$34 million by the end of December 2003. Our agreements with our banks also require that we achieve successful production at Fab 2 of 5,000 wafer starts per month by November 2002 and 15,000 wafer starts per month by September 2003. Each milestone provides for a seven and a half month grace period. In addition, our Fab 2 credit facility agreement has significant additional conditions and covenants. We do not expect to meet our additional milestones for production capacity at Fab 2 by their prescribed completion dates.

We are currently engaged in negotiations with our banks in connection with our financing obligations. While in the past we have been successful in procuring from our banks extensions to meet our additional financing obligations beyond the dates set forth in the credit facility agreement, we cannot assure you that our banks will agree to waive our current or any future failure by us to observe covenants or satisfy conditions under the facility agreement, some of which are not in our control, or that we will be able to refinance our indebtedness if they do not waive such failure. We are in the process of retaining a world leading first-tier consulting firm to review our Fab 2 plan in light of the changes that have occurred in the semiconductor market and world economy, and the capital expenditures we have made and expect to continue to make. We expect that our banks will look to the results of the report of the consultant we are retaining in evaluating the terms under which the banks will continue to fund the Fab 2 project.

If, as a result of any default, our banks were to accelerate our obligations, we would be obligated to immediately repay all loans made by the banks plus penalties, and the banks would be entitled to exercise the remedies available to them under the credit facility agreement, including enforcement of their lien against all our assets. An event of default under the credit facility and the subsequent enforcement by the banks of their remedies under the credit facility may allow our wafer partners, financial investors and the Investment Center of the State of Israel to declare a breach of our obligations to them and, based on our current available cash position, would jeopardize the Fab 2 project and our ability to continue our operations even in Fab 1.

FAILURE TO ACHIEVE MILESTONES AND COMPLY WITH VARIOUS CONDITIONS AND COVENANTS UNDER OUR FINANCING AGREEMENTS FOR FAB 2 COULD JEOPARDIZE FAB 2 AND OUR EXISTING OPERATIONS. Our receipt of the additional funds committed by our wafer partners and financial investors depends upon our achievement of conditions set forth in the share purchase agreements, including obtaining additional financing, receiving governmental grants, adding an additional wafer partner and meeting a milestone relating to the ramp-up of production at Fab 2. As part of our Fab 2 investment agreements, we must raise a cumulative total of \$50 million from new wafer partners by March 31, 2003, or our wafer partners will not be required to complete their investment for the fifth milestone. As part of the pending amendments to our agreements described below, we would be relieved of the obligation to raise an additional \$50 million from new wafer partners if we raised at least \$41 million from our current wafer and equity partners by the end of 2003 under the amended terms.

Under their agreements, our major wafer and equity partners are to complete their committed investments upon our satisfaction of the fifth milestone, which is the successful production of 5,000 wafer starts per month for two full consecutive months. Under our Fab 2 investment agreements, the fifth milestone is to be achieved by mid July-2003 when taking into account a seven and a half month grace period. We are currently in a position in which we will not achieve the fifth milestone by its prescribed completion date.

In March 2003, we reached an agreement with our major Fab 2 investors, who have agreed to advance the fifth and final Fab 2 milestone payment prior to our meeting the milestone and waive our requirement to raise \$50 million from new wafer partners. See "Item 5 - Operating and Financial Review and Prospects - Fab 2 Agreements." The amendment to the investment agreements is subject to the approval of our shareholders, our banks and other regulatory bodies, which may not be obtained. Should our banks agree to provide interim funding pending approval of the terms of this amendment, our major Fab 2 investors may (following approval by our shareholders) advance a portion of the amount they have agreed to pay under the terms of the amended fifth milestone payment agreements.

Failure to achieve any of our milestones or other commitments, due to either our failure to reach the minimum production capacity, or insufficient demand for our products, and to satisfy or comply with the other applicable conditions and covenants in our investment and Fab 2 credit facility agreement on a timely basis, may, unless such failure is waived, result in cancellation or delay of our Fab 2 funding arrangements and an event of default under the credit facility. An event of default under the credit facility and the subsequent enforcement by the banks of their remedies under the credit facility may allow our wafer partners, financial investors and the Investment Center to declare a breach of our obligations to them and would jeopardize the Fab 2 project and our ability to continue our operations even in Fab 1.

DEFERRALS OF FAB 2 EQUIPMENT PURCHASES COULD HARM OUR ABILITY TO SATISFY CUSTOMER ORDERS DUE TO INSUFFICIENT PRODUCTION CAPACITY. We are currently deferring Fab 2 equipment purchases pending the completion of discussions with our banks regarding our current financing obligations. Even if we successfully conclude the discussions with our banks and we continue to make equipment purchases, we may further defer our equipment purchase commitments in the event that market conditions do not improve significantly and the utilization of Fab 2 is lower than forecasted. However, in the event that our forecasts are inaccurate and market conditions significantly recover more rapidly than we can purchase, install and qualify necessary production equipment, we may not be able to fully meet customer demand and we will not be in a position to fully capitalize on the increase in demand for foundry services. Delays in purchasing equipment for our Fab 2 project may also result in a loss of suppliers, a delay in equipment delivery schedules and unfavorable payment terms. Consequently, any under-capacity will negatively impact our financial results, and may result in our need to raise additional funds to complete the Fab 2 project.

WE MAY FROM TIME TO TIME EXPERIENCE A SHORT-TERM LACK OF LIQUIDITY FOR FAB 2. In addition to the approximately \$1.15 billion which has been raised or committed to date to complete our Fab 2 project, we will need an additional approximately \$354 million through 2006. As a result, we may from time to time experience a short-term lack of liquidity for Fab 2 or may not be able to raise the required funding at all. If we foresee that we will be unable to secure additional financing, we may have to reevaluate, or even cease our operations. While we have been successful in the past at negotiating price reductions and arrangements to slow down or postpone payments to our suppliers and service providers when we had liquidity problems, we cannot assure you we will be able to do so in the future and any postponement of payments may delay the increase of capacity of Fab 2 and therefore harm our financial results.

Our Fab 2 business plan makes assumptions with respect to proceeds from the sales of wafer products to Fab 2 customers; however, we are continuously reevaluating our Fab 2 business plan to adapt it to the expected funds availability and the anticipated Fab 2 revenues. If we are not successful in generating sales of wafers to Fab 2 customers, our cash from operations will be negatively affected and we will be required to raise additional funds or decrease our level of purchases of new equipment for Fab 2.

WE MUST MEET CONDITIONS TO RECEIVE THE ISRAELI GOVERNMENT GRANTS AND TAX BENEFITS APPROVED FOR FAB 2. In connection with Fab 2, we have received approval for grants and tax benefits from the government of Israel under its Approved Enterprise Program. Under the terms of the approval, we are eligible to receive grants of 20% of up to \$1.25 billion invested in Fab 2 plant and equipment, or an aggregate of \$250 million, over a period of time. We are also entitled to a tax holiday on all taxable income related to Fab 2 for the first two years in which we have taxable income. To continue to be eligible for these grants and tax benefits, we must meet conditions provided in the applicable law and contained in our approved enterprise certificate, including a requirement that at least approximately \$400 million of our Fab 2 funding consist of paid-in-capital. If we fail to comply with these conditions in the future, some of the benefits received could be canceled, and we could be required to refund payments previously received under these programs or pay increased taxes. In addition, the funding commitments of our Fab 2 investors and our banks are conditioned on our Fab 2 approved enterprise status remaining in effect. As of March 31, 2003, we have received approximately \$90.9 million in grants from the Investment Center, and raised \$261.3 million as paid in capital towards the \$400 million.

Consistent with the requirements of Israeli law, our investment grant requires that we complete our investment program by 2005. Due to the later than planned commencement of construction of Fab 2 and prevailing market conditions, we do not currently expect to complete our Fab 2 investments through 2005. Israeli law limits the ability of the investment center to extend the 5-year investment limitation. We have notified the Investment Center of our revised investment schedule and it is currently being evaluated by the investment center. We have also informed the investment center of our reduced rate of annual investments and our lower than projected expectations for Fab 2 sales. While we have always ultimately been successful in concluding arrangements with the investment center, we cannot assure you that we will be successful in reaching arrangements with the investment center with respect to the remaining portion of our grants, which may result in the cancellation of all or a portion of our grants.

Our Fab 2 business plan makes assumptions for our receipt of additional government grants for investments in Fab 2 in excess of \$1.25 billion; however, our government grants are currently limited to \$250 million and there is no assurance that we will be entitled to any additional grants in the future.

FAB 2 COSTS MAY EXCEED OUR ESTIMATES. We estimate the total cost of the construction and equipping of Fab 2 will be approximately \$1.5 billion through 2006, including hiring and training personnel, purchasing and developing technology and equipment and other general expenses. However, the actual cost of Fab 2 may exceed our estimate as a result of several factors, including difficulties or delays in the construction of the facility or in commencement and ramp-up of production, higher insurance costs due to widespread global acts of terror, increases in equipment prices, and currency exchange rate or interest rate fluctuations. We may need to raise additional funds over the estimated total cost of approximately \$1.5 billion to cover those potential additional costs. There is no assurance that these additional funds will be available on a timely basis and on satisfactory terms.

GENERAL RISKS AFFECTING OUR BUSINESS

WE HAVE COMPLETED CONSTRUCTION OF OUR NEW FAB 2 FACILITY, HOWEVER WE STILL NEED TO COMPLETE THE EQUIPMENT INSTALLATION AND RAMP UP OF PRODUCTION IN FAB 2 TO SUCCESSFULLY COMPETE OVER THE LONG TERM. The trend within the semiconductor industry is toward ever-smaller features; state-of-the-art fabs are currently using process geometries of 0.18 microns and below. Our current facility, Fab 1, is limited to geometries of 0.35 microns and above. Fab 2 currently has production capacity of approximately 2,000 wafer starts per month, and we expect Fab 2 to be fully ready for production by mid-2003. We must successfully complete qualification of process technologies for Fab 2 and ramp up of production to full capacity in Fab 2 to successfully compete over the long term.

WE HAVE A RECENT HISTORY OF OPERATING LOSSES AND EXPECT TO OPERATE AT A LOSS THROUGH AT LEAST THE END OF 2004 PRIMARILY DUE TO NON-CAPITALIZED FAB 2 EXPENSES AND A HIGH LEVEL OF DEPRECIATION AND AMORTIZATION; OUR FACILITIES MUST OPERATE AT OR CLOSE TO CAPACITY AND IMPROVE OUR PRODUCT MIX TO BE PROFITABLE. Our Fab 1 facility operated at a loss for the last five years and is expected to operate at a loss through at least the end of 2003. Because fixed costs represent a substantial portion of the operating costs of semiconductor manufacturing operations, we must operate our facilities at or near full capacity to be profitable. We operated significantly below capacity from 1996 through 2002. Although utilization improved significantly during 2000, we experienced a slowdown in demand in the fourth quarter of 2000 that deepened in 2001 and continued into 2002. While our sales increased in each of the first three quarters of 2002, in the fourth quarter of 2002, we, again, experienced a slight reduction in sales. In light of the slowdown in the worldwide economy, which has and is expected to continue to negatively impact our business, we expect to continue to experience overall underutilization of our Fab1 facility at least through the end of 2003. We are currently operating Fab 1 at a capacity utilization of approximately 70%. If we do not operate Fab 1 at or near full capacity levels and make the transition to a higher mix of products manufactured utilizing our higher-margin processes, we may not be able to achieve and maintain profitable operations in Fab 1, which could in turn result in our disposing of this facility. Following the completion of the construction of our Fab 2 facility, equipment installation, qualification of process technologies and the start of ramp up of production, these technologies and other Fab 2 assets will start to incur operating expenses as well as depreciation and amortization. Accordingly, even as we begin high utilization of Fab 2, we need to achieve significant production volume in order to be profitable. As a result, we expect to operate at an overall loss at least through the end of 2004, even if we are able to achieve and maintain profitable operations in Fab 1.

CREDITS GIVEN TO OUR PARTNERS WILL AFFECT CASH FLOW FROM FAB 2 OPERATIONS. We have credited our partners with a portion of amounts that they have previously paid to us as long-term customer advances to be credited against future purchases by these partners. To date, these credits amount to approximately \$47.7 million. While the issuance of credits have improved our cash flow from operations, the utilization of credits by our partners will adversely impact our liquidity at such time as our partners begin to purchase wafers from Fab 2 since we will be generating a lower level of cash from the sale of wafers to our partners. See "Item 5. Operating and Financial Review and Prospects - Fab 2 Agreements" for a discussion of a proposed amendment to the terms of credits given to our wafer partners.

THE CYCLICAL NATURE OF THE SEMICONDUCTOR INDUSTRY AND THE RESULTING PERIODIC OVERCAPACITY AND PRESSURE TO REDUCE PRICES MAY SERIOUSLY HARM OUR BUSINESS. The semiconductor industry has historically been highly cyclical and has experienced significant economic downturns characterized by production overcapacity and rapid erosion of average sales prices. Historically, companies in the semiconductor industry have expanded aggressively during periods of increased demand. This expansion has frequently resulted in overcapacity and excess inventories, leading to a new downturn. We expect this pattern to repeat itself in the future. Our operating results for 1996 through 1999 were harmed by a downturn in the semiconductor market that resulted in reduced orders, underutilization of our facility and severe price erosion. Although utilization and average sales prices improved during 2000, demand slowed in the overall semiconductor market and in many of our end product markets beginning in the fourth quarter of 2000. This slowing in demand deepened in 2001 and continued in 2002. While analysts have predicted that the semiconductor market will strengthen in the second half of 2003, we cannot be assured that demand in the semiconductor market generally, or for our products, in particular, will improve.

While we are confident of the long-term growth prospects of the semiconductor business, we believe that the cyclical market behavior will continue. The overcapacity and price pressures characteristic of a prolonged downturn are likely to have an affect on all sectors of the market, and may not allow us to operate at a profit, even at full utilization of our Fab facilities and with an improved product mix. Therefore, the current downturn, and future downturns in the semiconductor business cycle, could seriously harm our financial results and business.

Fab 2 will give us significant additional manufacturing capacity and state-of-the-art capabilities to better serve our customers. However, it also significantly increases our cost structure and overall capacity and, therefore, our exposure to market downturns.

WE DEPEND ON A SMALL NUMBER OF CUSTOMERS AND BUSINESS PARTNERS FOR A SIGNIFICANT PORTION OF OUR REVENUES; WE MUST CONTINUE TO ATTRACT ADDITIONAL CUSTOMERS AND BUSINESS PARTNERS TO SUBSTANTIALLY INCREASE OUR OVERALL CAPACITY UTILIZATION IN BOTH OF OUR FACILITIES. For the twelve months ended 2002, approximately 60% of our business was generated by three of our customers, National Semiconductor Corporation (31%), Matsushita Electronic Inc., a Japanese semiconductor manufacturer (16%) and Motorola, Inc. (13%), and approximately 21% was generated by an additional five customers. Although we have expanded and are continuing to expand our customer base, we expect to continue to receive a significant portion of our revenue from a limited number of customers. Loss or cancellation of business from or decreases in the sales prices to these customers could seriously harm our financial results and business. Furthermore, our arrangements with certain large customers permit these customers to reduce their orders, in some cases with little advance notice. If these customers order significantly fewer wafers than forecasted, we will have excess capacity that we may not be able to sell, resulting in lower utilization of our facility. We may have to reduce prices in order to try to sell the excess capacity. In addition to the revenue loss that could result from unused capacity or lower sales prices, we might have difficulty adjusting our costs to reflect the lower revenues, which could harm our financial results.

We have also entered into wafer partner agreements and agreements with technology providers under which we have committed a portion of our Fab 2 capacity for contemplated orders from these parties. Although we believe that our overall relationship with our wafer partners and technology providers, including their ownership of equity and the credits against wafer purchases which are established under the agreements, provide very strong incentives for the wafer partners and technology providers to become significant Fab 2 customers, they are not obligated to utilize all or any portion of their allocated capacity. Although we are constantly making efforts to identify additional wafer partners and customers to fill our new facility, there can be no certainty that we will be able to do so in the short or the long term.

THE SEMICONDUCTOR MARKET IS SUBJECT TO RAPID CHANGE; WE MUST KEEP PACE TO MAINTAIN AND DEVELOP OUR PRODUCTS AND SERVICES FOR THE MARKETS. The semiconductor market is characterized by rapid change, including the following:

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

In order to maintain our current customer base and attract new customers, we must continue to advance our manufacturing process technologies. We are developing and/or introducing to production specialized process technologies. We have also transferred 0.18 micron technology from Toshiba and begun the transfer of 0.13 micron technology from Motorola and are working on independent development of technologies for Fab 2. Our ability to achieve and maintain profitable operations depends on the successful development and introduction to production of these processes.

The development and introduction to production and the successful commercialization of these new processes is subject to the following risks, which could seriously harm our business:

- o technical problems or delays in the development of the new processes;
- o competition in attracting and retaining customers for the new processes;
- o difficulty in recruiting and retaining qualified employees;
- o failure of products that use our specialized processes to gain market acceptance; and
- o failures of our customers' designs.

We also need to invest in continued process and/or product development, including the procurement of third party intellectual property in order to keep pace with changing technologies and to fulfill our customers' requirements. We may not have the required resources to make such procurements or invest in such development or such development and procurement efforts may not be successful.

WE MUST SUCCESSFULLY COMPLETE DEVELOPMENT, INTRODUCTION TO PRODUCTION AND PERFORMANCE ENHANCEMENT OF OUR MICROFLASH(R) MEMORY AND OTHER ADVANCED PROCESSES. We have made a substantial investment in the development of our MICROFLASH processes. We have introduced the first of our microFLASH processes into production with the manufacture of a 2 megabit stand-alone memory device and an embedded multi-time programming module, with a limited number of rewrite cycles. We have also started development of our MICROFLASH process for introduction in Fab 2. The long-term commercial success of our MICROFLASH process is dependent on our success in developing next generation processes and advances to this process, which will allow production of MICROFLASH products rated for greater than 10,000 erase-rewrite cycles. There is no assurance that we will successfully complete the planned development and introduction to production and advancement of our MICROFLASH processes. If we do not successfully complete the advancement of our MICROFLASH processes, we may not be able to achieve the planned sales and/or gross margins. Furthermore, the successful development of competing technologies may make our MICROFLASH technology obsolete prior to its reaching market.

We are engaged in the co-development with one of our customers of a specialized imaging process technology, for use of this technology in Fab 1 on an exclusive basis. In addition, we started to develop this process technology in Fab 2 using process geometries of 0.18 microns. If these development efforts are delayed or are not successful or if the customer is unable to commercialize its products, this could result in a serious loss of business and in our inability to recover our investments from these efforts.

WE MAY ENCOUNTER DIFFICULTIES AND DELAYS IN COMPLETING THE CONSTRUCTION AND EQUIPPING OF FAB 2 AND IN THE TRANSFER AND IMPLEMENTATION OF THE TECHNOLOGIES FOR FAB 2. The construction and equipping of Fab 2 is a substantial and complex project, which requires the timely participation by and coordination of the activities of many participants, including our contractor, equipment vendors, technology providers outside consultants and our own employees. We have completed the construction but not the equipping necessary for production of 10,000 200mm wafers per month at Fab 2 and continue to install equipment to reach production capacity at this level. We will continue the construction and equipping necessary to reach the full production capacity of 33,000 200mm wafers per month in the future. Failures or delays in construction or in obtaining or coordinating the necessary equipment and other resources on a timely basis will delay the completion of the project and will add to its cost. We need to complete development of the 0.18-micron industry standard technology, transfer the 0.13 micron technology from Motorola and develop new process technologies for Fab 2 to suit our customers' needs. Any failures or delays in this process could have an adverse affect on our ability to complete the project and ramp up production at Fab 2. We can give no assurance that failures or delays in the construction or equipping of the facility or in the transfer and qualification of the technologies and ramp up of production will not occur. Such failures or delays may result in delays in funding, cash shortage or defaults under our Fab 2 financing agreements, any of which may negatively impact our financial results.

IF WE FAIL TO MEET CONDITIONS, WE MAY LOSE OUR EXCLUSIVE FOUNDRY LICENSE WITH SAIFUN. Saifun Semiconductors Ltd. has granted us exclusive foundry manufacturing rights to Saifun's proprietary N-ROM technology. Our agreement with Saifun requires that we maintain minimum levels of annual sales of products, which incorporate Saifun's technology through 2005. If we do not meet these minimum sales levels, our foundry manufacturing rights will become nonexclusive. As a result, if our Saifun manufacturing rights become non-exclusive, other foundries may obtain licenses from Saifun, which will enable them to manufacture semiconductor products for third parties using the Saifun process technology in direct competition with us.

DEMAND FOR NEW PROCESSES AND PRODUCTS IS DIFFICULT TO PREDICT. The success of our businesses depends on emerging markets and new products. In order for demand for our processes to grow, the markets for the end products using these processes must develop and grow. For example, the success of our imaging process technologies will depend, in part, on the markets for digital photography and video. Because our processes may be used in many new applications, it is difficult to forecast demand. If demand is lower than expected, we may have excess capacity, and if demand is higher than expected, we may be unable to fill all of the orders we receive.

WE MAY EXPERIENCE DIFFICULTY IN ACHIEVING ACCEPTABLE DEVICE YIELDS, PRODUCT PERFORMANCE AND DELIVERY TIMES AS A RESULT OF MANUFACTURING PROBLEMS. 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 productivity. Microscopic impurities such as dust and other contaminants, difficulties in the production process or defects in the key materials and tools used to manufacture a wafer can cause a percentage of the wafers to be rejected or individual semiconductors on specific wafers to be non-functional. We have from time to time experienced production difficulties that have caused delivery delays or returns and lower than expected device yields. We may also experience difficulty achieving acceptable device yields, product performance and product delivery times in the future as a result of manufacturing problems. These problems may result from, among other things, the introduction of new processes or the expansion or upgrading of existing facilities. Any of these problems could seriously harm our financial results and business.

WE NEED TO HIRE ADDITIONAL EMPLOYEES FOR FAB 2. Our future success depends on our continuing ability to identify, hire, train and retain additional highly qualified technical and managerial personnel. There has historically been a shortage of qualified employees in the semiconductor industry and in Israel in particular, and competition for such personnel has at times been intense. If we fail to attract or retain the highly qualified technical and managerial personnel we need now or in the future, our financial results and business may be harmed.

WE DEPEND ON OUR KEY MANAGEMENT AND TECHNICAL EMPLOYEES; LOSS OF THE SERVICES AND REPLACEMENT OF KEY EMPLOYEES COULD HARM OUR OPERATIONS. The loss of key employees could diminish our ability to develop and maintain relationships with customers and potential customers. The loss of technical personnel could harm our ability to run production smoothly and to meet development and implementation schedules. We do not maintain key man life insurance on any of our executives or employees.

In March 2003, both of our Co-Chief Executive Officers, Dr. Rafael Levin and Dr. Yoav Nissan-Cohen, tendered their resignations and effective as of June 1, 2003, both will be replaced by Carmel Vernia who has been designated by the Board to serve as Acting Chief Executive Officer, and Chairman of our Board of Directors commencing June 1, 2003. Mr. Vernia previously served as Israel's Chief Scientist of the Ministry of Industry and Trade and before that as a senior executive in Comverse Technology. Nevertheless, there is no certainty that we will be able to achieve a smooth transition from our veteran Chief Executive Officers, who have both faithfully served us in various senior management roles since our inception in 1993. In addition, our shareholders must approve the appointment of Mr. Vernia as the Chairman of our Board of Directors as well as Acting Chief Executive Officer. If our shareholders do not approve either appointment, we will have to seek alternative appointments and such process may have an adverse effect on our business.

WE FACE COMPETITION; SOME COMPETITORS ARE BETTER POSITIONED TO WITHSTAND MARKET DOWNTURNS. The semiconductor foundry industry is highly competitive. We compete with other dedicated foundries and with integrated semiconductor and end-product manufacturers that produce integrated circuits for their own use and/or allocate a portion of their manufacturing capacity to foundry operations. Many of our competitors have one or more of the following competitive advantages over us:

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

WE DEPEND ON A LIMITED NUMBER OF OUR SUPPLIERS OF RAW MATERIALS AND DO NOT TYPICALLY HAVE LONG-TERM SUPPLY CONTRACTS WITH THEM. Our manufacturing processes use many raw materials, including silicon wafers, chemicals, gases and various metals. These raw materials generally are available from several suppliers. In many instances, however, we purchase raw materials from a single source due to process requirements that make purchases from multiple sources impractical. If any of the following occurs in the future, it may take a substantial period of time for us to modify our production processes to allow the use of alternative materials:

- o raw materials are not available from our sources;
- o we are unable to obtain sufficient quantities of raw materials and other supplies in a timely manner;
- o there is a significant increase in the costs of raw materials;
- o we are required for other reasons to seek other sources for such materials.

Although supplies for the raw materials that we use currently are adequate, shortages could occur in various critical materials due to an interruption of supply or increased industry demand. Any such shortages could result in production delays that could have a material adverse effect on our business and financial condition.

WE DEPEND ON A LIMITED NUMBER OF MANUFACTURERS AND VENDORS THAT MAKE AND SELL THE COMPLEX EQUIPMENT WE USE IN OUR MANUFACTURING PROCESSES. In periods of high market demand, the lead times from order to delivery of this equipment could be as long as 12 to 18 months. The timing and cost of upgrades to Fab 1 and of equipping Fab 2 may be seriously affected by conditions in the equipment market. If there are delays in the delivery of needed equipment or if there are increases in the cost of this equipment, it could seriously delay the completion of or otherwise harm the Fab 2 project and the upgrades to Fab 1 or harm our financial results.

THE EXEMPTION ALLOWING US TO OPERATE OUR MANUFACTURING FACILITIES SEVEN DAYS A WEEK IS TEMPORARY AND MAY NOT BE RENEWED. We operate our 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, which has been renewed several times in the past, expires on December 31, 2003. In addition, a significant increase in the number of employees permitted to work under this exemption will be needed as we ramp up production at Fab 2. We expect the exemption to be renewed, but if the exemption is not renewed and we are forced to close the facility for this period each week, our financial results and business will be harmed.

CURRENCY EXCHANGE AND INTEREST RATE FLUCTUATIONS COULD INCREASE THE COST OF OUR OPERATIONS. Almost all of our cash generated from operations and from our financing and investing activities is denominated in dollars and NIS. Our expenses and costs are denominated in NIS, dollars, Japanese Yen and Euros. We are, therefore, exposed to the risk of currency exchange rate fluctuations.

Our borrowings, including the loans contemplated under our Fab 2 credit facility, provide for interest based on a floating Libor rate, and we are therefore subject to exposure to interest rate fluctuations. Furthermore, if our banks incur increased costs in financing our Fab 2 credit facility due to changes in law or the unavailability of foreign currency, our banks may exercise their right to increase the interest rate on our Fab 2 credit facility as provided for in the credit facility agreement.

We regularly 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 and exchange rate fluctuations, which may increase the cost of our activities, particularly our construction and equipping of Fab 2, and following the ramp up of production in Fab 2, will increase our financing expenses.

POTENTIAL INTELLECTUAL PROPERTY RIGHTS DISPUTES COULD MAKE OUR OPERATIONS MORE EXPENSIVE OR REQUIRE US TO CHANGE OUR PROCESSES. Our ability to compete successfully depends in part on our ability to operate without infringing on the proprietary rights of others. Possible infringement claims could harm our business by requiring us to pay royalties or to change our manufacturing processes. There are no lawsuits currently pending against us regarding the infringement of patents or intellectual property rights of others. However, we have been a party to such claims in the past and recently received a notice from a technology company claiming that we are infringing its patent rights. This notice was followed by an offer to license the technology company's patents for a one-time license payment. All prior claims against us have been resolved through license agreements the terms of which have not had a material effect on our business. One of these agreements expires at the end of 2005 and we may be unable to extend or renew it on similar terms. We are currently analyzing the merits of the technology company's claim letter as well as its license offer.

WE DEPEND ON THE INTELLECTUAL PROPERTY OF THIRD PARTIES IN PROVIDING SERVICES TO OUR clients. We rely on third party intellectual property to provide foundry and design services to our clients. We believe that we are in compliance with the licensing agreements with the owners of these rights and that the licensing agreements adequately protect our rights. If problems or delays arise with respect to such intellectual property, our customers' design and production could be delayed, resulting in underutilization of our capacity. Failure to maintain or acquire licenses could harm our business. In addition, license fees and royalties payable under these agreements may impact our margins.

WE DEPEND ON TECHNOLOGY PARTNERS TO BROADEN OUR PORTFOLIO OF PROCESS TECHNOLOGIES. In order to compete in our market, we must continue to advance our process technologies through our internal technology development efforts and through technology alliances with leading semiconductor suppliers. Although we have an internal process development team dedicated to developing new semiconductor manufacturing process technologies, we depend on technology partners to advance our portfolio of process technologies. If we are unable to continue our technology alliances, or are unable to enter into new technology alliances with other leading semiconductor suppliers, we may not be able to continue providing our customers with leading-edge process technologies, which could seriously harm us.

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 relating to the use, discharge and disposal of toxic or otherwise hazardous materials used in our production processes. We are currently operating under a conditional permit from the Israeli Ministry of Environmental Affairs concerning the concentration of fluoride in our wastewater. We believe that we are currently in compliance with the written terms of our permit with the following one exception. We are monitoring the levels of fluoride in accordance with an oral understanding with the Israeli Ministry of Environmental Affairs concerning how often we monitor the levels of fluoride, resulting in our monitoring the levels of fluoride less frequently than required by the written terms of our permit. We are working towards getting this understanding with the environmental authorities reduced to writing. There have been instances in the past where we were not in compliance with these restrictions, and despite our best efforts there may be future instances of non-compliance. We are also in discussions with the Israeli Ministry of Environmental Affairs regarding the possibility of easing of conditions set forth in our permit. If we cannot maintain our compliance with the conditions set forth in our permit or in our other understandings with the Ministry, we may be required to allocate financial resources for the implementation of an infrastructure solution in order to be in compliance with all the conditions. We estimate that such an infrastructure solution would cost approximately \$1 million. While we believe that we are currently in compliance in all other material respects with applicable environmental laws and regulations, if we fail to use, discharge or dispose of hazardous materials appropriately or if applicable environmental laws or regulations change in the future, we could be subject to substantial liability or could be required to suspend or adversely modify our manufacturing operations.

POSSIBLE PRODUCT RETURNS COULD HARM OUR BUSINESS. Products manufactured by us are subject to return for specified periods if they are defective or otherwise fail to meet customers' specifications. Although we establish what we believe to be reasonable provisions against possible product returns based on our past experience, product returns in excess of such provisions may have an adverse effect on our business and financial condition.

WE MAY BE REQUIRED TO REPAY GRANTS TO THE ISRAEL INVESTMENT CENTER THAT WE RECEIVED IN CONNECTION WITH FAB 1. Our Fab 1 facility received grants and tax benefits under the government of Israel Approved Enterprise program. As of December 31, 2001, we completed our investments under our Fab 1 program and are no longer entitled to any further investment grants for future capital investments in Fab 1. In connection with our Fab 1 program, the Investment Center had taken the position that our ability to receive Fab 1 grants was dependent on our meeting specified forecasted levels of Fab 1 revenues and maintaining specified levels of Fab 1 employees and that we may be required to refund the grants we received if we do not meet specified forecasted levels of Fab 1 revenues and maintain specified levels of Fab 1 employees. Although we believe that the Investment Center's position is incorrect we have agreed that if we do not achieve Fab 1 revenues of \$90 million for 2003 and \$100 million for 2004 and maintain at Fab 1 at least 600 employees for 2003 and 625 employees for 2004, subject to prevailing market conditions, we will, if demanded by the Investment Center, be required to repay the Investment Center up to approximately \$2.5 million. Fab 1 revenues in 2002 were \$43.7 million. At March 31, 2003, we employed approximately 440 employees in Fab 1.

TERRORIST ATTACKS THAT OCCURRED IN NEW YORK AND WASHINGTON ON SEPTEMBER 11, 2001, THE WAR IN IRAQ AND OTHER ACTS OF VIOLENCE OR WAR MAY MATERIALLY AFFECT THE MARKETS ON WHICH OUR SECURITIES TRADE, THE MARKETS IN WHICH WE OPERATE, OUR OPERATIONS AND PROFITABILITY. In the aftermath of the September 11, 2001 terrorist attacks on the United States, the United States-led coalition of nations commenced a series of retaliatory military strikes in Afghanistan upon strategic installations of the Taliban regime, and governmental intelligence authorities issue from time to time warnings of the imminent threat of further attacks against civilian and military installations. On March 17, 2003, a coalition of countries led by the United States and the United Kingdom commenced large scale military action against Iraq with the avowed purpose of effecting a change in the Iraqi regime. These attacks and armed conflicts, as well as the uncertainty surrounding these issues, have had, and we expect will continue for the unforeseeable future to have, an adverse effect on the global economy, and the semiconductor industry and could result in a disruption of our business or that of our customers. In addition, these events may discourage foreign technical experts and foreign employees, upon whom we rely for support and maintenance of our specialized fabrication equipment and for consultation necessary for the ongoing construction of Fab 2 and development activity in Fab 2, from traveling to our facilities in Israel, which may result in delays to the Fab 2 construction and deployment timetable and could affect the performance of the equipment.

CORPORATE GOVERNANCE SCANDALS AND NEW LEGISLATION COULD INCREASE THE COST OF OUR OPERATIONS. As a result of recent corporate governance scandals and the legislative and litigation environment resulting from those scandals, the costs of being a public company in general are expected to increase in the near future. New legislation, such as the recently enacted Sarbanes-Oxley Act of 2002, will have the effect of increasing the burdens and potential liabilities of being a public reporting company. This and other proposed legislation may increase the fees of our professional advisors and our insurance premiums.

RISKS RELATED TO OUR ORDINARY SHARES

ISSUANCE OF ADDITIONAL SHARES PURSUANT TO FAB 2 RELATED EQUITY FINANCINGS WILL DILUTE THE INTEREST OF CURRENT AND PROSPECTIVE SHAREHOLDERS. In connection with the Fab 2 project, we have issued to date, 31,141,772 ordinary shares to our wafer and equity partners. Subject to final approval of certain proposed amendments to our agreements, upon the payment of the fifth and final Fab 2 milestone payments by our wafer and equity partners, we will issue 8,382,794 additional ordinary shares pursuant to our existing agreements with our partners and approximately another 3 million additional ordinary shares, subject to fluctuations in the price of our ordinary shares in the future, in connection with the second installment of the fifth milestone payment. Up to 800,000 additional ordinary shares may be issued upon the exercise of warrants held by our banks and our Fab 2 contractor. In January 2002, we sold units comprised of convertible debentures, options to purchase our ordinary shares and options to purchase additional convertible debentures. Up to 8,102,746 additional ordinary shares are potentially issuable pursuant to these units as follows: (1) 2,697,068 shares would be issued assuming conversion of all the outstanding convertible debentures and (2) 2,211,596 shares would be issued assuming exercise of all the outstanding options to purchase ordinary shares, (3) 1,844,082 ordinary shares would be issued assuming exercise of all the outstanding options in connection with the distribution of rights to our shareholders in October 2002 and (4) 1,350,000 ordinary shares upon exercise of Warrants. We will also need to issue ordinary shares or securities convertible into ordinary shares in connection with new agreements or transactions with wafer and/or equity partners or private or public offerings of ordinary shares to raise required additional equity capital in connection with Fab 2. These issuances will result in significant dilution of the interest of current shareholders.

THE MARKET PRICE OF OUR ORDINARY SHARES HAS BEEN, AND MAY CONTINUE TO BE, VERY VOLATILE. The market prices of our ordinary shares and the securities of other publicly traded companies have fluctuated widely. The following factors, among others, may significantly impact the market price of our ordinary shares:

- o announcements of technological innovations or new products by us or our competitors;
- o developments or disputes concerning patents or proprietary rights;
- o publicity regarding actual or potential results relating to products under development by us or our competitors;
- o events or announcements relating to our collaborative relationship with others;
- o economic and other external factors;
- o period-to-period fluctuations in our operating results; and
- o volatility in the securities markets.

MARKET SALES OF LARGE AMOUNTS OF OUR SHARES ELIGIBLE FOR FUTURE SALE MAY LOWER THE PRICE OF OUR ORDINARY SHARES. Of our 43,435,532 outstanding ordinary shares, 7,522,853 are freely tradable and an additional 1,372,180 shares held by non-affiliates are eligible for sale pursuant to Rule 144 under the Securities Act of 1933, subject to the time, volume and manner of sale limitations of Rule 144. Of these shares, 180,897, 772,667 and 418,818 shares will be freely tradable under Rule 144(k) by April 2003, May 2003 and September 2003, respectively. An additional 476,213 and 597,692 shares held by non-affiliates will be eligible for sale under Rule 144(k) by April 2003 and October 2003 respectively.

In addition, our affiliates (Israel Corporation Technologies (ICTech) Ltd., SanDisk Corporation, Alliance Semiconductor Corporation and Macronix International Co., Ltd.) hold 30,466,595 of our outstanding shares, of which 16,446,942 are currently eligible for sale subject to the time, volume and manner of sale limitations of Rule 144. An additional 4,404,968 shares held by these affiliates will be eligible for sale under Rule 144 by April 2003 and an additional 5,528,648 shares by October 2003. We also agreed with our affiliates to register the resale of 4,086,037 ordinary shares that they purchased in our rights offering in October 2002. We expect the registration statement covering these shares to be effective by the end of the second quarter of 2003.

We have agreed with Ontario Teachers' Pension Plan Board ("OTPP") to register for resale the 3,000,000 ordinary shares and the 1,350,000 ordinary shares underlying the warrants that OTPP purchased from us in October 2002. OTPP has agreed not to sell any of these securities before the end of July 2003

We are unable to predict the effect that sales of our ordinary shares may have on the then prevailing market price of our ordinary shares. It is likely that market sales of large amounts of our ordinary shares (or the potential for those sales even if they do not actually occur) will have the effect of depressing the market price of our ordinary shares. This could impair our ability to raise capital through the sale of our equity securities.

WE MAY FAIL TO MEET THE MAINTENANCE STANDARDS FOR THE NASDAQ NATIONAL MARKET OR THE TEL AVIV STOCK EXCHANGE, WHICH WOULD NEGATIVELY IMPACT THE LIQUIDITY OF OUR ORDINARY SHARES. If we fail to comply with the requirements for continued listing on the NASDAQ National Market or the Tel Aviv Stock Exchange, our ordinary shares, warrants and convertible debentures may be delisted from trading on such market. Consequently, selling and buying our securities would be more difficult because of delays in the timing of transactions and greater difficulty in selling securities and obtaining accurate quotations. These factors could result in lower prices and larger spreads in the bid and ask prices for our ordinary shares than might otherwise be obtained.

If our ordinary shares are delisted from the NASDAQ National Market, we cannot assure you that our securities will trade on the NASDAQ SmallCap Market. In addition, even if we obtain such alternative listing, broker-dealers would be subject to a SEC rule that imposes additional sales practice requirements on broker-dealers who sell low-priced securities to persons other than established customers and institutional accredited investors. For transactions covered by this rule, a broker-dealer must make a special suitability determination for the purchaser and have received the purchaser's written agreement to the transaction prior to sale. Consequently, this rule may affect the ability of broker-dealers to sell our ordinary shares and may affect the ability of shareholders to sell our ordinary shares in the secondary market.

UNDER OUR ARTICLES OF ASSOCIATION, TWO SHAREHOLDERS HOLDING TOGETHER 33% OF OUR OUTSTANDING SHARES CONSTITUTE A QUORUM FOR CONDUCTING A SHAREHOLDERS MEETING.

Under our articles of association, two shareholders holding together 33% of our outstanding shares constitute a quorum for conducting a shareholders meeting. We have several large shareholders who together hold in excess of 33% of our outstanding shares and could constitute a quorum for purposes of conducting a shareholders meeting. While we have always solicited proxies from our shareholders prior to our shareholders meetings, we would have a sufficient quorum with two large shareholders even if none of our other shareholders were to participate in our shareholder meetings. If only two large shareholders were to participate in one of our shareholder meetings, these shareholders would determine the outcome of our shareholder meetings without the benefit of the participation of our other shareholders.

RISKS RELATED TO OUR OPERATIONS IN ISRAEL

INSTABILITY IN ISRAEL MAY HARM OUR BUSINESS. All our manufacturing facilities and our corporate and primary 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, as well as incidents of civil unrest. 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, there has been an increase in unrest and terrorist activity which began in September 2000 and which has continued with varying levels of severity into 2003. Certain parties with whom we do business have 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 contracts claiming that they are not obligated to perform their commitments under those agreements pursuant to force majeure provisions. We do not believe that the political and security situation has had any material impact on our business to date; however, we can give no assurance that security and political conditions will have no such effect 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 could make it more difficult for us to raise capital. Furthermore, our manufacturing facilities are located exclusively in Israel, which is currently experiencing civil unrest, terrorist activity and military action. Since we do not have a detailed disaster recovery plan that would allow us to quickly resume manufacturing, we could experience serious disruption of our manufacturing if acts associated with this conflict result in any serious damage to our manufacturing facility. Our business interruption insurance may not adequately compensate us for losses that may occur and any losses or damages incurred by us could have a material adverse effect on our business.

MANY OF OUR EMPLOYEES IN ISRAEL ARE OBLIGATED TO PERFORM MILITARY RESERVE DUTY. In the event of severe unrest or other conflict, individuals could be required to serve in the military for extended periods of time. In response to the increase in terrorist activity and the renewed Palestinian uprising, there has been a significant call up of military reservists, and it is possible that there will be additional call-ups in the future. Our operations 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.

IT MAY BE DIFFICULT TO ENFORCE A U.S. JUDGMENT AGAINST US, OUR OFFICERS AND DIRECTORS AND SOME OF THE EXPERTS NAMED IN THIS ANNUAL REPORT OR TO ASSERT U.S. SECURITIES LAW CLAIMS IN ISRAEL. We are incorporated in Israel. Substantially all of our executive officers and directors and our Israeli accountants and attorneys, are nonresidents of the United States, and a substantial portion of our 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 us or any of these persons. Additionally, it may be difficult for you to enforce civil liabilities under U.S. Federal Securities laws in original actions instituted in Israel.

ITEM 4. INFORMATION ON THE COMPANY

HISTORY AND DEVELOPMENT OF THE COMPANY

We are a pure-play independent wafer foundry established in 1993. We manufacture integrated circuits or IC's, with geometries ranging from 1.0 to 0.35 and recently initiated manufacture in geometries of 0.18 microns. In addition, we provide complementary manufacturing services and design support. Our base technology is foundry standard digital CMOS process technology, and we also offer value added advanced non-volatile memory solutions, mixed-signal and CMOS image-sensor technologies. ICs manufactured by us are incorporated into a wide range of products in diverse markets, including consumer electronics, personal computer and office equipment, communication, automotive, professional photography and medical products.

Our legal and commercial name is Tower Semiconductor Ltd. We were incorporated under the laws of Israel. Our manufacturing facilities and executive offices are located in the Migdal Haemek Industrial Park, Post Office Box 619, Migdal Haemek, 23105 Israel, and our telephone number is 972-4-650-6611. Our worldwide web site is located at [HTTP://WWW.TOWERSEMI.COM](http://www.towersemi.com). Information on our web site is not incorporated by reference in this annual report.

Upon our establishment in 1993, we acquired National Semiconductor Corporation's Israeli 150-mm wafer fabrication facility, which we sometimes refer to as Fab 1, and commenced operations as an independent foundry. Since then, we have significantly modernized our facilities and equipment, expanded our capacity and advanced our process technologies.

In January 2001, we commenced construction of a new, state-of-the-art 200-mm wafer fabrication facility, which we refer to as Fab 2, located adjacent to our current facility in Migdal Haemek. Fab 2 will operate in geometries of 0.18 microns and below, using advanced materials and advanced CMOS technology from Toshiba, Motorola and other technologies that we might acquire or develop independently. We have substantially completed the construction stage of Fab 2, are producing prototypes for our customers, and are at the stage of final qualification of our 0.18 micron process technology. When the production ramp is completed, Fab 2 is expected to have the capacity to produce up to 33,000 200-mm wafers per month and employ approximately 1,100 people.

BUSINESS OVERVIEW

INTRODUCTION

Semiconductor devices are the foundation of modern electronic equipment and systems, constituting critical components in an increasingly wide variety of applications, including computers systems and peripherals, digital still and video photography and consumer electronics. A semiconductor device may be either a discrete device, such as an individual transistor, or an IC in which a number of transistors and other elements are combined to form a more complex circuit. A wide variety of semiconductor products currently are in use, ranging from commodity products (such as DRAM, SRAM, Flash and other commodity memories) to more differentiated products (such as microprocessors, ASICs and numerous digital, analog, embedded memory, imaging and mixed-signal ICs).

Users of foundry manufacturing services include so-called "fabless" semiconductor manufacturers which design their own proprietary devices but which do not have their own manufacturing facility, as well as integrated semiconductor manufacturers and end-product manufacturers which have manufacturing capacity but who "outsource" a portion of their manufacturing needs to outside foundries. Foundry services are now utilized by nearly every major semiconductor company in the world. While historically, integrated device manufacturers and end-users with their own fabs have used outside foundry services mainly for their incremental manufacturing needs, increasingly they have begun to rely more heavily on foundries for their core requirements. These trends have led periodically to increased demand for advanced foundry semiconductor manufacturing services.

We manufacture ICs on silicon wafers, generally using the customer's proprietary designs. In some cases we use third-party designs or our own proprietary product design. Our end-product is a silicon wafer containing multiple identical ICs. The wafers are typically "diced" (separated into individual ICs), "assembled" (mounted in a plastic or ceramic package) and tested. In most cases our customer assumes responsibility for dicing, assembly and testing. In some cases we take responsibility for the production and delivery of finished IC products to our customer on a "turn-key" basis, and subcontract some or all of the dicing, assembly and testing functions to third parties. We also maintain limited assembly capabilities for manufacturing prototype units to facilitate customer evaluation and thereby accelerate new product introduction.

In 2002, we continued to focus on developing and providing customers with new, advanced proprietary process technologies and related value-added services in three specialized market areas: Flash memories, CMOS image sensors and mixed-signal applications. We succeeded in establishing significant business in each of these specialized markets. We plan to continue developing and offering advanced process technologies in these specialized markets, which we believe will enable us to improve sales and margins and more effectively compete with other foundries, including those with manufacturing capacity at feature sizes which we cannot offer. In January 2001, we commenced construction of Fab 2, which in its final stage is expected to more than double our capacity and enable us to manufacture wafers at 0.18 microns and below.

The semiconductor industry has historically been highly cyclical on a seasonal and on a long-term basis. On a long-term basis, the market has fluctuated, cycling through periods of weak demand, production overcapacity, excess inventory and lower sales prices and periods of strong demand, full capacity utilization, product shortages and higher sales prices. For example, the market saw the lower end of the cycle in 2001 and some improvement in 2002. Although there can be no assurance that this trend will continue or increase in 2003, some analysts suggest that there will be significant improvement in the second half of 2003 with a transition to a strong market in 2004 and 2005.

Due to the continuing weakness in the semiconductor industry and uncertainty regarding the timing of a turnaround in the foundry business, we revised our plans for the ramp up of production in our Fab 2 facility. We deferred the ramp up in order to align our expenses in connection with the completion of the facility with the market and business realities facing our company, our customers and our industry. We now expect to commence commercial Fab 2 production by mid-2003.

TECHNOLOGY OVERVIEW

Our Fab 1 manufacturing technologies currently include 1.0 micron, 0.8, 0.6, 0.5 and 0.35 micron CMOS process technologies, with multiple levels of metal and single or double levels of poly, for standard logic, Flash and EPROM, image sensor and mixed-signal products. Fab 2 is expanding our portfolio of CMOS and other manufacturing technologies to 0.18 micron and below.

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 process technologies that we (1) license from third parties, (2) develop at our customers' request or in cooperation with our customers, (3) develop ourselves for expected market demand and (4) develop utilizing intellectual property licensed from third parties.

Due to certain facility and other technological and economical constraints, we are unable to reduce process geometries below 0.35 microns in Fab 1. However, Fab 2 will utilize advanced CMOS process technologies in geometries of 0.18 micron and below which are being transferred to us under technology transfer and license agreements with Toshiba and Motorola, and other advanced technologies that we are developing on our own or in cooperation with others.

During 2001 and 2002, we transferred Toshiba's 0.18 micron CMOS logic process which we will utilize in Fab 2. We have nearly completed the development of a 0.18 micron foundry standard process and mixed-signal modules, and we have begun the development of advanced MICROFLASH and CMOS image sensor process technologies and mixed-signal modules for Fab 2. Furthermore, we began the technology transfer of Motorola's 0.13-micron HiPerMOS7 (HiP7) CMOS process technology for Fab 2. Together with Motorola, we are developing a foundry standard process version, which we intend to use as the 0.13-micron technology platform for our analog, digital and mixed-signal processes, as well as for our proprietary CIS and flash technologies.

Approximately 68% of the IC products we produced for our customers during 2002 utilized our enhanced value added technology features, such as Flash, EPROM, CMOS Image Sensor and mixed-signal. We believe that our specialized process technology features distinguish our process offerings from those of competing foundries and attract major semiconductor companies to utilize our manufacturing services. Our Fab 1 facility continues to focus on expanding its offer of specialized process technologies. Similarly, Fab 2 is expected to manufacture standard logic products but its main focus will be future specialized products.

In conjunction with our corporate quality assurance policy, on February 6, 2003 we received the official ISO 9001:2000 certification from The Standards Institution of Israel. The principles of the ISO 9001 standard, 2000 edition, help organizations to implement quality management systems that ensure consistent production of high-quality products, customer satisfaction and continuous improvement. A company receives ISO 9001:2000 certification upon verification by an independent examiner that it has complied with the standard. The ISO 9001:2000 certification encompasses all our facilities, including both our Fabs and our design center.

OUR PROCESS TECHNOLOGIES

FLASH. Flash memory is a variation of Electrically-Erasable Programmable Read-Only Memory (EEPROM). Programmable Read-Only Memory (PROM) is read-only memory that can be written to only once, while EEPROM allows stored information to be selectively written and erased through special electrical stimulus. Flash memory enables faster erase of large sectors of memory cells. Our MICROFLASH technology, based on Saifun's patented N-ROM technology, provides greater memory cell density than other currently available Flash architectures for given design rule generation, permitting an approximately four-fold reduction in the size of the memory cell for stand-alone memories and embedded applications in a given geometry. The relative simplicity of our MICROFLASH manufacturing process enables the technology to offer cost advantages over competing Flash technologies for high density memories. Using our 0.5 micron technology, we have introduced the first of our MICROFLASH processes into production with the manufacture of a 2 megabit stand-alone memory device and embedded multi-time programming modules, with a limited number of rewrite cycles.

During 2001, we continued the development of our MICROFLASH process for introduction in Fab 2 with advances to our MICROFLASH process that allow production of MICROFLASH products rated for 10,000 and more erase-rewrite cycles. In June 2002, we entered into an agreement with Matsushita Electronic Inc. for the joint development of 0.18-micron embedded MICROFLASH technology. Our development partner granted to us a royalty-free, non-exclusive license to its intellectual property with respect to its 0.18 micron process technology for manufacturing semiconductor devices that utilize our jointly developed technology in order to provide semiconductor foundry services or for our own semiconductor business. We granted our development partner a royalty-free, non-exclusive license with respect to our MICROFLASH technology for manufacturing semiconductor devices that utilize our jointly developed technology for its own semiconductor business. We are also developing MICROFLASH for memory products; and we have commenced sampling of this technology and intend to move to production in the second half of 2003. There is no assurance that we will successfully complete the planned development and introduction to production and advancement of our MICROFLASH processes.

As part of our strategy to offer a broad range of competitive embedded flash solutions, we entered into a development and license agreement with Virage Logic Corp., a company specializing in embedded memory technology. The agreement enables Virage Logic to develop and license to us and our customers the NOVeA(TM) family of non-volatile embedded memories on our 0.18-micron process technology. The NOVeA is based on large flash cells, but a standard CMOS manufacturing process, and therefore it is competitive for products requiring embedded flash modules with low densities. The agreement also grants us the right to license Virage Logic's 0.13-micron process technology for NOVeA in the future. The 0.18 micron version is currently under development and planned to be offered to customers in late 2003, although there is no certainty that the development will be completed by the end of 2003. In addition, we are currently conducting a feasibility study in connection with a proposed new architecture, which was invented by one of our employees.

CMOS IMAGE SENSORS. CMOS image sensors (CIS) are image capture devices that are manufactured using a process similar to the CMOS process used in the manufacture of memory and logic ICs. CMOS image sensors are suitable for a broad spectrum of digital imaging applications. The high-end sensor market that we are targeting includes applications such as studio quality mega-pixel digital cameras and ingestible capsule cameras for medical imaging. While the portion of these markets to adopt CMOS image sensors for advanced optical applications is still a small one, we believe that CMOS image sensors are gradually becoming the preferred technology to traditional charge coupled devices (CCDs).

Our advanced CIS process is also intended to meet the growing demand for high quality optical sensors. Our dedicated manufacturing and testing processes assure consistently high electro-optical performance of the integrated sensor through wafer-level characterization. Our CMOS image sensor process has demonstrated superior optical characteristics, excellent spectral response, and high resolution and sensitivity. The ultra-low dark current, high efficiency and accurate spectral response to our photodiode enable faithful color reproduction and acute detail definition. In addition, our innovative "stitching" technology enables the manufacture of single ultra high-resolution CMOS image sensor containing millions of pixels. Our 0.5 and 0.35 micron CMOS image sensor processes permit the customer to create high quality solutions and integrates a product's CMOS analog and logic circuitry together with the sensor pixel array all on one chip, thereby facilitating miniaturization, reducing power consumption and increasing performance. In 2002, we began production of IC's for FillFactory NV in connection with a customized 13.85 million pixel CMOS image sensor produced by FillFactory for Kodak Professional. This product utilizes our 0.5 micron CMOS image sensor processes. We are currently developing a 0.18 micron CMOS image sensor process.

MIXED-SIGNAL. The growth in demand for products which utilize analog circuits in conjunction with digital data storage and/or manipulation has led to growth in the demand for mixed-signal ICs. A significant portion of the mixed-signal market tends to lag behind the rest of the semiconductor industry in the migration pace to smaller feature sizes. We have developed the Tower Mixed-Signal Design Kit, which contains comprehensive characterization of a wide range of analog devices, providing our customers with the ability to design mixed-signal devices for their specific needs. In addition, we developed certain mixed signal features for use with our 0.18 micron process, and are working to develop more features.

From time to time, at a customer's request, we develop a specialty process module, which we use for such customer on an exclusive basis, and if permitted under our agreements with our customers, we then add it to our process offering. In 2002 and 2001, in cooperation with a customer, using also its know-how and IP, we developed an enhanced 0.35 micron CMOS image sensor process to be used exclusively for this customer. Production ramp on this process is currently expected to start in the second half of 2003.

The development and introduction to production of advanced technologies is a complex process, the success of which is dependent on many factors, some of which may be beyond our control. We therefore cannot predict when or if the development and introduction to production of these new processes will be successfully completed.

LICENSING PARTNERS

ARM FOUNDRY PROGRAM

In November 2002 we joined the Arm Foundry License Program of ARM Holdings, a provider of 16/32-bit embedded reduced instruction set computer (RISC) microprocessor solutions. The ARM Foundry License Program enables fabless semiconductor companies in emerging markets to gain access to ARM processor technology for use in the design and manufacture of advanced system on-chip (SoC) solutions. Through the ARM Program, we will gain access to two of ARM's most widely used embedded microprocessor cores, enabling us to produce customers' ARM core-based products in Fab 2. As part of the agreement, ARM will validate cores built on our 0.18-micron process to provide silicon-proven intellectual property. In accordance with the agreement, we are obligated to pay ARM a license fee for each use of the ARM Cores, maintenance and support fees and other fees in the event that we exercise certain options under the agreement.

ARTISAN COMPONENTS, INC.

In June 2002, we entered into a master services and license agreement with Artisan Components, Inc. Artisan is a provider of industry standard design platforms, which are used worldwide. As part of the agreement, Artisan will deliver a suite of memory generators, a standard cell library and a complete set of general-purpose I/Os optimized for our 0.18-micron CMOS process. The agreement provides for the customization of their platforms for us. In consideration, we will pay Artisan license and customization fees for the design platform. In addition, we will pay royalties to Artisan in connection with integrated circuits developed through use of the licensed platforms.

CMOS

TOSHIBA. In April 2000, we entered into a technology transfer agreement with Toshiba Corporation of Japan, pursuant to which Toshiba has and will transfer to us certain advanced CMOS technologies for use in Fab 2. In exchange for certain license and technology transfer fees and royalties, Toshiba has and will provide us with recipes, know-how and patent licenses and have trained a group of our engineers and managers.

MOTOROLA. In September 2002, we entered into a technology transfer and development agreement with Motorola, pursuant to which Motorola has and will transfer to us its 0.13-micron HiPerMOS7 CMOS process technology for Fab 2. The agreement provides for the cooperation between us and Motorola to further enhance the technology to provide compatibility with the widest range of industry-standard design tools and services. We intend to use the industry standard process version as the 0.13-micron technology platform for our analog, digital and mixed-signal processes, as well as for our proprietary CMOS image sensor and flash technologies.

CHIPIDEA MICROELECTRONICA S.A. In January 2003 we entered into a license and design agreement with Chipidea Microelectronica S.A., a Portuguese corporation which designs and sells various types of blocks for ICs. In accordance with the agreement, we agreed to pay Chipidea a service fee in return for its customization of its blocks for manufacture by us. Following the customization, our customers will be able to access these blocks, at a preferred cost, and to integrate them in their ICs for manufacture by us.

EMBEDDED FLASH MEMORY

VIRAGE LOGIC CORP. In March 2002, we entered into a development and license agreement with Virage Logic Corp., a company specializing in embedded memory technology. The agreement enables Virage Logic to develop and license to us and our customers the NOVeA(TM) family of non-volatile embedded memories on our 0.18-micron technology. The NOVeA is based on large flash cells, but a standard CMOS manufacturing process, and therefore it is competitive for products requiring embedded flash modules with low densities. The agreement also grants us the right to license Virage Logic's 0.13-micron process technology for NOVeA in the future. The 0.18 micron version is currently under development and planned to be offered to customers in late 2003, although there is no certainty that the development will be completed by the end of 2003.

MATSUSHITA ELECTRONIC INC. In June 2002, we entered into an agreement with our development partner, Matsushita Electronic Inc. for the joint development of 0.18-micron embedded MICROFLASH technology. Matsushita granted to us a royalty-free, non-exclusive license to its intellectual property with respect to its 0.18 micron process technology for manufacturing semiconductor devices that utilize our jointly developed technology in order to provide semiconductor foundry services or for our own semiconductor business. We granted our development partner a royalty-free, non-exclusive license with respect to our MICROFlash technology for manufacturing semiconductor devices that utilize our jointly developed technology for its own semiconductor business.

SALES AND MARKETS

When we commenced business in March 1993, our only customer was National Semiconductor Corporation. We have succeeded in adding significant new customers, but we remain dependent on a small number of customers for most of our business. In 2002, approximately 60% of our business was generated by our top three business partners, National Semiconductor Corporation (31%), Matsushita Electronic Inc. (16%) and Motorola, Inc. (13%). Sales to the next five largest customers accounted for approximately 21% of our sales. Most 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 facility for such customers. Most of the products manufactured at Fab 1 are being "sole sourced" in our facility. Information regarding the geographical breakdown of sales is incorporated herein by reference to Note 15A to our consolidated financial statements.

During 2001 and 2002, we worked with several customers on introducing various CMOS image sensor products to production in Fab 1, including co-development of a special 0.35 micron CMOS image sensor process for use by one of our customers which is expected to start production during the second half of 2003. In 2002, our revenues were derived from the following regions: United States (62%), Far East (25%), Europe (11%) and Israel (2%).

During each of 2002, 2001 and 2000, we manufactured in Fab 1 over 200 sophisticated semiconductor products for use by our customers (or end users) in a wide variety of applications. These applications include personal computer products and peripherals (such as super input/output devices), communications products (such as two-way radios), wireless communication products (such as cellular telephones), image sensor products (such as cameras on a chip and x-ray sensors) and consumer products (such as television and monitor on-screen displays). The number and end-market distribution of the products that we manufacture in 2003 and in future periods will be determined by customer orders. We commenced the construction of Fab 2 in 2001 and now expect to start initial production by mid-2003 and to achieve sales by the second half of 2003. Initially, we expect that most of our orders will come from our wafer partners, SanDisk, Alliance Semiconductor, Macronix International, and QuickLogic and later from additional customers, some of which are currently in initial prototyping phases. We are reinforcing our marketing and sales team, in order to increase our sales in the US, Europe and the Far East and recently hired Harold Blomquist as our Senior Vice President of Business Operations and as Chief Executive Officer of our US subsidiary to head up these efforts.

PROCUREMENT AND SOURCING

Our manufacturing processes use many raw materials, including silicon wafers, chemicals, gases and various metals. These raw materials generally are available from several suppliers. In connection with our technology advancement plans, including our Fab 2 business plan, we expect to continue to make purchases of semiconductor manufacturing equipment.

COMPETITION

The semiconductor foundry industry is highly competitive. We compete with other dedicated foundries, including Taiwan Semiconductor Manufacturing Corporation, United Microelectronics, Chartered Semiconductor Manufacturing and emerging Chinese, Korean and Malaysian foundries, and with integrated device companies and end-product manufacturers that produce ICs for their own use and/or allocate a portion of their manufacturing capacity to foundry operations.

Many of our competitors have greater manufacturing capacity, multiple manufacturing facilities, more advanced technological capabilities, a more diverse and established customer base, greater financial, marketing, distribution and other resources, and/or a better cost structure than ours. In our standard CMOS process offerings, we compete primarily by offering competitive pricing and a high level of service, quality and process customization.

Due to certain facility and other constraints, we are unable to reduce our process geometries in Fab 1 below 0.35 microns and are therefore limited in our ability to advance our process technologies in Fab 1. While we have commenced construction of Fab 2, which will allow us to offer to our customers process geometries of 0.18 micron and below, we believe that we will continue to be able to compete using Fab 1 by offering specially targeted products and technologies that do not require the reduced process geometries.

During the downturns in the semiconductor market over the last seven years, we faced significant competition from other independent foundries, from our customers' internal manufacturing capacity and from other semiconductor manufacturers that made unused capacity available for foundry customers. During these periods, we experienced increased pressure to reduce prices to match reductions by our competitors, including certain of our customers with excess internal capacity. In many cases we implemented price reductions to maintain customer relationships and increase utilization of Fab 1. In some cases these price reductions resulted in wafer sales prices at or near the variable cost of producing the wafers, and even with such price reductions, we had excess capacity.

PROPRIETARY RIGHTS

We use internally developed process technologies and process technologies licensed from customers and from other third parties. Our 1.0 micron process and elements of our 0.8 micron processes are licensed from customers under royalty-free licenses. Other processes we use (including certain elements of the metallization technology used in conjunction with the 1.0 micron and 0.8 micron technologies) were developed over the last several years by our engineering team. Our specialized 0.6 micron process for EPROM applications and certain elements of our 0.5 and 0.35 micron processes utilize certain proprietary elements which are licensed from third parties. We recently patented certain methods and technology relating to our MICROFLASH, image sensor and other processes and maintain a number of other patents. We have also developed a specific 0.35 micron image sensor process based on one of our customer's intellectual property and we will manufacture based on this process for our customer on an exclusive basis. The disclosure in this Item above under "Licensing Partners" is incorporated herein by reference.

PROPERTY, PLANTS AND EQUIPMENT

Our manufacturing facilities are located in Migdal Haemek, Israel.

FAB 1. We acquired the Fab 1 facility from National in March 1993 when National, which had operated the facility since 1986, sold the facility as part of a worldwide restructuring of its manufacturing operations. 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. Fab 1 includes an approximately 51,900 square foot clean room.

Since we commenced manufacturing at Fab 1, we have increased our manufacturing capacity from 5,000 wafer starts per month, using 1.25 and 1.0 micron processes, to approximately 20,000 wafer starts per month. Our current demand and technology mix are primarily concentrated on our 0.35-micron, 0.5-micron and other specialized processes, and we thus estimate that the effective wafer production capacity of Fab 1 is 16,000 wafer starts per month. However, our exact capacity is variable and depends on the combination of the processes being used and may be significantly lower as a result of certain of our combinations. 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 within the building shell of our original facility. Approximately one-third of our Fab 1 capacity is capable of running our advanced process technologies.

FAB 2. In January 2001, we commenced construction of Fab 2, our new advanced wafer fab adjacent to our current facility in Migdal Haemek. The new fab will operate in geometries of 0.18 micron and below, using advanced materials and advanced CMOS technology from Toshiba and Motorola, and other technologies to be licensed and developed by us. Initial production at the new facility is currently scheduled to commence by mid-2003. In April 2002, we set up the Fab 2 clean room and started equipment installation. The overall clean room area in Fab 2 is approximately 100,000 square feet. When the ramp-up of production is completed, we expect that Fab 2 will have a capacity of up to 33,000 200-mm wafers per month and employ approximately 1,100 people. We currently expect that the total cost of the construction, equipping of the facility and ramp-up of the manufacturing line will be approximately \$1.5 billion, of which approximately \$700 million have been expended through December 31, 2002. The discussion of the financing of the Fab 2 project is incorporated herein by reference to Item 5 and Note 13A to our consolidated financial statements included in this annual report.

The land on which Fab 2 is located is the subject of a Development Agreement with the Israel Lands Authority entered into in November 2000, pursuant to which we will enter into a long-term lease on the land through 2049. In addition, in connection with our future development plans, in 2001 we also entered into agreements for the purchase of rights with respect to two parcels of land located near our facilities in Migdal Haemek. The closing of the transactions is subject to the receipt of the consents and approvals from various regulatory authorities, including that of the Israel Lands Authority. Both parcels of land and our rights thereto will be subject to certain limitations as customary with land leased by the Israel Lands Authority.

During the last three years, we have invested significantly in the purchase of fixed assets, primarily in connection with the construction of Fab 2, technology advancement and capacity expansion program. Capital expenditures for the purchase of plant and equipment were approximately \$209 million, \$336 million and \$64 million, before related Investment Center grants of \$ 37 million \$67 million and \$21 million in 2002, 2001 and 2000, respectively.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

SELECTED FINANCIAL DATA

The following selected financial data has been derived from our audited consolidated financial statements for the periods, which have been prepared in accordance with Israeli GAAP. See Note 20 to our annual audited financial statements for a reconciliation of material differences between Israeli GAAP and U.S. GAAP for the years presented. Our audited consolidated financial statements include, in the opinion of management, all adjustments necessary to fairly present the financial position and results of operations of our company for those periods. The financial data set forth below should be read in conjunction with our consolidated financial statements and the notes thereto and the other financial information appearing elsewhere in this annual report.

	YEAR ENDED DECEMBER 31,				
	2002	2001	2000	1999	1998
	(IN THOUSANDS, EXCEPT PER SHARE DATA)				
STATEMENT OF OPERATIONS DATA:					
Sales.....	\$51,801	\$52,372	\$ 104,775	\$69,815	\$69,637
Cost of sales.....	67,022	76,733	88,787	77,033	76,781
Gross profit (loss).....	(15,221)	(24,361)	15,988	(7,218)	(7,144)
Research and development	17,031	9,556	8,965	9,238	8,107
Marketing, general and administrative expenses	17,091	14,489	11,428	8,710	8,747
Operating loss.....	(49,343)	(48,406)	(4,405)	(25,166)	(23,998)
Financing income (Expense), net.....	(2,104)	1,465	1,394	2,277	2,741
Other income (expense), net.....	45	8,419	(478)	17	13
Income (loss) before income tax expense (benefit)	(51,402)	(38,522)	(3,489)	(22,872)	(21,244)
Income tax expense (benefit).....	--	--	500	(2,405)	(5,700)
Net income (loss).....	(51,402)	\$(38,522)	\$(3,989)	\$ (20,467)	\$(15,544)
Basic loss per ordinary share.....	(1.63)	\$(1.92)	\$ (0.26)	\$ (1.54)	\$ (1.18)
Weighted average number of ordinary shares outstanding	31,523	20,020	13,676	13,156	13,137

	AS OF DECEMBER 31,				
	2002	2001	2000	1999	1998
	(IN THOUSANDS)				
BALANCE SHEET DATA:					
Working capital	\$ 21,927	\$ (16,335)	\$ 28,635	\$ 56,001	\$ 66,037
Total assets	\$ 716,261	\$ 472,054	\$ 179,298	\$ 155,211	\$ 180,047
Long-term debt.	\$ 253,000	\$ 115,000	\$ 12,064	\$ 12,106	\$ 12,127
Shareholders' equity	\$ 298,334	\$ 252,805	\$ 134,648	\$ 122,121	\$ 143,325

OVERVIEW AND TREND INFORMATION

The following discussion should be read in conjunction with the selected financial data included above and our consolidated financial statements and the related notes thereto included in this annual report and incorporated herein by reference.

We operated at a loss in 2002 due primarily to a gross loss attributable to reduced utilization and sales related to Fab 1 operations and non-capitalized expenses related to the Fab 2 project. Since the last quarter of 2000, we have experienced a dramatic slowdown in demand for our products and services, reflecting a general weakening in demand and buildup of inventories in the overall semiconductor market. We expect this weakness to continue through at least mid-2003. We expect to operate at a loss in 2003 and 2004 due to continued underutilization of Fab 1 and non-capitalized costs related to Fab 2 in the beginning of 2003, and expected low volume and the commencement of depreciation and amortization of Fab 2 assets in the second half of 2003. The world economy and the semiconductor industry have also been negatively affected by the terror attacks in the United States and the Iraqi conflict. We do not know how long these negative market effects will continue, or how the conduct of the United States' war on terrorism and the US military action in Iraq will affect the global economy generally and the semiconductor market in particular. We expect demand and general market conditions to improve in the second half of 2003.

The trend within the semiconductor industry is toward ever-smaller features; state-of-the-art fabs are currently using process geometries of 0.18 microns and below. As demand for smaller geometries increases, there is downward pressure on the pricing of larger geometry products and increasing underutilization of fabs which are limited to manufacturing larger geometry products, which results in less profitability for manufacturers of larger geometry products. Our current facility, Fab 1, is limited to geometries of 0.35 microns and above. Since we are currently unable to manufacture at geometries of below 0.35 microns, our results of operations have recently been adversely affected as a result of reduced pricing of larger geometry wafer products and the decrease in worldwide demand for semiconductor products. Fab 2 will operate at geometries of 0.18 microns and below. We must successfully complete ramp up of production in Fab 2, the timely introduction of state-of-the art process technologies and cultivate customer orders if we are to successfully compete over the long term.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

CRITICAL ACCOUNTING POLICIES

CAPITALIZABLE COSTS. In accordance with generally accepted accounting principles, we capitalize most of our costs relating to the establishment of Fab 2, primarily for property and equipment and other assets. We do, however, incur expenses in connection with the establishment of Fab 2, which are not capitalizable. Capitalizable Fab 2 costs include only incremental direct costs that are identifiable with and related to these assets and that are incurred prior to their initial operation. Directly identifiable costs include incremental direct costs associated with acquiring, constructing, establishing, installing, integrating and transferring property and equipment and the technology to be implemented in Fab 2 and costs directly related to pre-production test runs of these assets that are necessary to get them ready for their intended use. These costs include interest on long-term debt and convertible debentures and payroll and payroll-related costs of employees who devote time and are dedicated solely to the acquiring, constructing, establishing, installing, integrating and transferring of property and equipment and the technology to be implemented in Fab 2. Allocation of capitalizable direct costs is based on management's estimates and methodologies including time sheet inputs. Under different assumptions, the classification of these costs may be different, which may significantly affect our financial position and results of operations. The effect, if any, under Israeli GAAP and US GAAP would be similar.

REVENUE RECOGNITION. In accordance with generally accepted accounting principles, our revenues are recognized upon shipment or as services are rendered when title has been transferred, collectibility is reasonably assured and acceptance criteria are satisfied, based on performing electronic, functional and quality tests on the products prior to shipment and customer on-site testing. Such testing reliably demonstrates that the products meet all of the specified criteria prior to formal customer acceptance, and that product performance upon customer on-site testing can reasonably be expected to conform to the specified acceptance provisions. Prior to commencement of production by us, we and our customers, at their sites, test and pre-approve the prototype on the basis of which specifications and features the ordered products will be produced. 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 recognition, however an accrual for estimated returns, which is computed primarily on the basis of historical experience, is recorded. Changes in assumptions for determining the accrual for returns, or failure to meet our customers' acceptance criteria prior to shipment, may affect the timing of our revenue recognition, and cause our results of operating to vary from quarter to quarter. Accordingly, our financial position and results of operations may be affected. That effect, if any, under Israeli GAAP and US GAAP would be similar.

DEPRECIATION AND AMORTIZATION OF FAB 2 ASSETS. We expect that the Fab 2 property and equipment and the 0.18 technology will be ready for their intended use by mid-2003, at which time their depreciation and amortization, based on the straight-line method, shall commence. Currently we estimate that the expected economic life of the Fab 2 assets will be as follows: (i) prepaid perpetual land lease and buildings - 14 to 25 years; (ii) machinery and equipment - 5 years; and (iii) the 0.18 technology - 4 years, while amortization shall phase in commencing on the dates on which each of the Fab 2 manufacturing lines is ready for use. Accordingly, we expect that the depreciation and amortization expense relating to Fab 2 facilities, during each quarter following commencement of its operations, will be approximately \$30 million. Changes in our estimations regarding Fab 2 assets' expected economic life or a change in the dates on which each of the Fab 2 manufacturing lines is ready for use, might significantly affect our depreciation and amortization expenses. That effect, if any, under Israeli GAAP and US GAAP would be similar.

IMPAIRMENT OF ASSETS. In January 2003, the Israeli Accounting Standards Board issued Standard No.15, "Impairment of Assets", which is effective for financial statements for reporting periods commencing January 1, 2003 or thereafter. This Standard addresses the accounting treatment and presentation of impairment of assets, and establishes procedures to be implemented in order to ensure that assets are not presented in amounts exceeding their recoverable value. Though according to US GAAP, e.g. FASB 144 and FASB 142, recoverability tests are performed based on undiscounted expected cash flows, Standard No. 15 indicates that an asset's recoverable value is the higher of the asset's net selling price and the asset's value in use, the latter being equal to the asset's discounted expected cash flows. While we estimate that the adoption of the provisions of Standard No. 15 as of December 31, 2002, would not have had a material effect on our financial position and results of operations as of such date, the use of different assumptions with respect to the expected cash flows from our assets and other economic variables, primarily the discount rate, may lead to different conclusions regarding the recoverability of our assets' carrying values and to the potential need to record an impairment loss for our long-lived assets.

RESULTS OF OPERATIONS

The following table sets forth certain statement of operations data as a percentage of sales for the years indicated.

	YEAR ENDED DECEMBER 31,		
	2002	2001	2000
STATEMENT OF OPERATIONS DATA:			
Sales.....	100.00%	100.0%	100.0%
Cost of sales.....	129.4	146.5	84.7
Gross profit (loss)	(29.4)	(46.5)	15.3
Research and development expenses, net.....	32.8	18.2	8.6
Marketing, general and administrative expenses.....	33.0	27.7	10.9
Operating loss.....	(95.2)	(92.4)	(4.2)
Financing income(expense), net.....	(4.0)	2.8	1.3
Other income (expense).....	0	16	(0.4)
Loss before income tax benefit (expense).....	(99.2)	(73.6)	(3.3)
Income tax benefit (expense).....	--	--	(0.5)
Loss.....	(99.2)%	(73.6)%	(3.8)%

SALES. Sales in 2002 decreased by 1.0% to \$51.8 million from \$52.4 million in 2001 compared to a 50% decrease from \$104.8 million in 2000. The 1% decrease in 2002 is attributable to 10% lower wafer shipments as well as a reduction of 9% in the average price per wafer as a result of weakening demand in the semiconductor industry that was offset by \$8 million in revenue associated with our joint development agreement with Matsushita Electronic Inc. for the development of 0.18 micron embedded MICROFLASH technology. In 2001, the 50% decrease was primarily attributable to 52.8% lower wafer shipments compared to 2000 as a result of weakening demand in the semiconductor industry.

COST OF SALES. Cost of sales in 2002 was \$67.0 million compared with \$76.7 million in 2001 and \$88.8 million in 2000. The decrease in cost of sales was attributable to cost savings activities that were implemented in Fab 1, offset by fixed manufacturing costs and uncapitalized expenses related to the establishment of Fab 2. The decrease in 2001 was primarily attributable to the lower utilization of the facility. Due to our high level of fixed manufacturing costs, we have not been able to reduce our cost of sales in proportion to the reduction in sales.

GROSS PROFIT (LOSS). Gross loss in 2002 was \$15.2 million compared with a gross loss of \$24.4 million in 2001 and a gross profit of \$16.0 million in 2000. Our gross loss is due to our reduced production sales and our higher uncapitalized expenses related to the establishment of Fab 2. Our gross margin was better in 2002 than in 2001 primarily due to cost savings activities in Fab 1 and the gross profit from joint development with Matsushita Electronic Inc. Our gross loss in 2001 was primarily attributable to our reduced sales and higher level of fixed costs.

RESEARCH AND DEVELOPMENT. Research and development expenses in 2002 increased to \$17.0 million from \$9.6 million in 2001 and \$9.0 million in 2000. The increase both in 2002 and 2001 was primarily due to increased research and development activities for technologies to be implemented in Fab 2. Research and development expenses are reflected net of participation grants received from the Israeli government.

MARKETING, GENERAL AND ADMINISTRATIVE. Marketing, general and administrative expenses in 2002 increased to \$17.1 million from \$14.5 million in 2001 and \$11.4 million in 2000 primarily due to deployment for Fab 2 activities and higher marketing efforts among new and potential Fab 2 customers during 2002 and 2001.

OPERATING LOSS. Operating loss in 2002 was \$49.3 million compared to \$48.4 million in 2001 and \$4.4 million in 2000. The increased operating loss in 2002 as compared to 2001 was due to higher research and development expenses as well as marketing expenses in connection with Fab 2. The increased operating loss in 2001 as compared to 2000 was primarily attributable to the increased gross loss and non-capitalized expenses incurred in connection with Fab 2.

FINANCING INCOME (EXPENSES), NET. Financing expenses in 2002 was \$2.1 million compared with \$1.5 million financing income in 2001 and \$1.4 million financing income in 2000. Our financing costs in 2002 and 2001, most of which were not included in results of operations but were capitalized to Fab 2 assets during the establishment of Fab 2, were comprised primarily of bank loans interest as well as expenses in 2002 related to convertible debentures. While in 2001 non-capitalized financial expenses were off-set by financial income, primarily bank interest on proceeds from our Fab 2 investors, resulting in net financial income in 2002 financial expenses exceeded financial income due to the decrease in cash and cash equivalents. For further details relating to the components of our financial income and expenses, see Note 16 to our consolidated financial statement, which is incorporated herein by reference.

OTHER INCOME (EXPENSES), NET. Other income, net, in 2002 were \$0.045 million compared to other income, net, of \$8.4 million in 2001 and other expense of \$0.5 million in 2000 due to the sale of our shareholding in Virage Logic Corp. in 2001 for a capital gain of \$9.5 million offset by a \$1.1 million write off of our investment in Azalea Microelectronics Corp. in 2001.

TAXES ON INCOME. Due to our recent history of operating losses, in 2002, 2001 and 2000, we established valuation allowances against all deferred tax assets, except to the extent of existing deferred tax liabilities. We therefore recognized no income tax benefit attributable to our net operating loss.

LOSS. Our loss in 2002 was \$51.4 million compared to a loss of \$38.5 million in 2001 and \$4.0 million in 2000. The increased loss was primarily attributable to the increase in our non-capitalized expenses, research, development and marketing expenses related to Fab 2 and in 2001, our increased loss was also attributable to lower sales.

LIQUIDITY AND CAPITAL RESOURCES

At December 31, 2002, we had an aggregate of \$69.7 million in cash, cash equivalents, and short-term and long-term interest-bearing deposits, of which \$51.3 million was contractually restricted for Fab 2 use only (other than \$11.9 million which may generally only be used to redeem and pay interest on our convertible debentures and which may also be used for Fab 2 subject to the restrictions set forth in the Fab 2 credit facility), compared to \$33.2 million as of December 31, 2001, of which \$3.5 million was contractually restricted to use in Fab 2. Our Fab 1 bank agreement includes a covenant that we have at least \$5 million in our bank accounts during the term of our Fab 1 credit facility. During 2002, we generated cash from the following sources: (a) from our financing activities, we raised \$128.0 million from bank loans, net of repayments, \$21.5 million proceeds from sale of securities, net, and \$96.8 million from our issuance of shares, net, and (b) from our investment activities, we received \$40.5 million from Investment Center grants. During 2002, we invested \$239.3 million in construction, equipment and other assets, primarily in connection with our purchase and transfer of technology from Toshiba and construction and equipping of Fab 2. The continuing under-utilization of our existing wafer fabrication facility and Fab 2 non-capitalized costs and operating expenses are expected to result in negative cash flow from operating activities in 2003 with some improvement expected in 2004.

In January 2001, our banks agreed to provide us with a credit facility of up to \$40 million to fund our working capital needs and equipment purchases for Fab 1. As of December 31, 2002, we had drawn down \$30 million of loans under the facility, \$20 million of which bears interest at a rate of Libor plus 1.5 % and is repayable in five years. In May 2002, \$10 million of loans were repaid, and we have also agreed with our banks that the \$10 million comprising the unused portion of the facility will be cancelled. As of December 31, 2002 the remaining loans were \$13 million to be repaid quarterly through March 2006. See also "Fab 2 Agreements" below for a description of our credit facility in connection with Fab 2.

Through 2002, we had sufficient liquidity to permit us to conduct our operations and to carry out the Fab 2 project.

We began 2003 with a cash balance available for Fab 1 activities of \$18.4 million. We expect to have positive cash flow from our Fab 1 operating activities, while we expect to have negative cash flow from our financing and investment activities, primarily due to repayments under our Fab 1 credit facility. We expect to have adequate liquidity for our Fab 1 activities in 2003.

If we conclude the arrangements with our banks and Fab 2 investors, as discussed below in this Item under the section entitled "Fab 2 Agreements," we expect to have adequate liquidity for our Fab 2 activities in 2003. In 2003, we expect to make capital investments of approximately \$250 million and to have negative cash flow from Fab 2 operations of approximately \$85 million. We expect to fund our Fab 2 activities during 2003 from the following sources: (1) Fab 2 wafer partners and equity investors under existing commitments, at least \$44.7 million; (2) additional loans under the Fab 2 credit facility, \$188 million; (3) Investment Center grants, \$44 million; and (4) equity investors, investment activity and additional sales of securities. We cannot assure you that we will be able to obtain funds from these sources as expected, due to existing or potential defaults under our Fab 2 agreements, poor conditions in capital markets and a weak semiconductor market, failure to achieve milestones and other factors, which may affect our ability to raise funds. For additional disclosure of our Fab 2 funding arrangements and risks related to these agreements and our financing of the Fab 2 project, see the disclosure under the caption "Fab 2 Agreements" in this Item and under Item 3. "Risk Factors--Risks Related to the Fab 2 Project". If we do not satisfy our need for funds for Fab 2 or if the timing of the receipt of financing lags behind the timing of expenses, we may from time to time experience lack of liquidity for our Fab 2 activities.

The following table summarizes our material obligations and commitments as of December 31, 2002 to make future payments under contracts to which we are committed:

PAYMENT DUE BY PERIOD
(US\$ IN THOUSANDS)

CONTRACTUAL OBLIGATIONS	TOTAL	LESS THAN 1 YEAR	2 YEARS	3 YEARS	4 YEARS	5 YEARS	AFTER 5 YEARS
	-----	-----	-----	-----	-----	-----	-----
Short term debt and other current liabilities.....	\$ 82,109	\$ 82,109	\$ -	\$ -	\$ -	\$ -	\$ -
Long term debt*.....	317,336	17,794	24,424	77,080	92,785	80,898	24,355
Convertible debenture*.....	31,289	1,136	1,129	1,129	7,362	7,126	13,407
Operating leases.....	1,024	342	270	261	142	9	-
Fab 2 construction & equipment agreements.....	125,130	120,992	4,138	-	-	-	-
Other long-term liabilities.....	51,574	3,250	3,250	3,250	3,250	3,250	35,324
	-----	-----	-----	-----	-----	-----	-----
Total contractual obligations.....	\$608,462	\$225,623	\$33,211	\$81,720	\$103,539	\$91,283	\$73,086
	=====	=====	=====	=====	=====	=====	=====

AMOUNT OF COMMITMENT EXPIRATION PER PERIOD
(US\$ IN THOUSANDS)

OTHER COMMERCIAL OBLIGATIONS	TOTAL AMOUNTS COMMITTED	LESS THAN 1 YEAR	1-3 YEARS	4-5 YEARS	AFTER 5 YEARS
Standby letters of credit**.....	\$ 14,816	\$ 14,816	-	-	-
Guarantees**.....	103	103	-	-	-
Total commercial commitments.....	\$ 14,918	\$ 14,918	-	-	-

* Total amounts include expected interest payments for the presented periods.

** These standby letters of credit and guarantees secure Fab 2 construction and equipment obligations as detailed in the table above.

The tables above do not include other categories of obligations or commitments, such as royalty agreements and short term service agreements for Fab 2. We are unable to reasonably estimate the total amounts to be paid under the terms of these agreements, as the royalties and required services are a function of future sales revenues and the volume of business in Fab 2.

FAB 2 AGREEMENTS

In January 2001 we commenced construction of Fab 2, our new advanced wafer fab adjacent to our current facility in Migdal Haemek, Israel. Production at the new facility is expected to commence by mid-2003. We have substantially completed the construction stage, are producing prototypes for our customers, and are at the stage of final qualification of our 0.18 micron process technology. When completed, Fab 2 will employ approximately 1,100 people and will have the capacity to produce up to 33,000 200-mm wafer starts per month. Fab 2 will allow us to offer state-of-the art manufacturing services utilizing a 0.18 micron core process technology and other specialized processes. Ultimately, we anticipate offering process geometries of 0.13 micron copper technology and below. We expect the total cost of the construction, equipping of the facility and ramp-up of the manufacturing line will be approximately \$1.5 billion.

As described below, since 2000, we entered into several important Fab 2 agreements and arrangements with key technology partners, wafer and equity financing partners, the Israeli Investment Center and two leading Israeli banks.

TECHNOLOGY AGREEMENT WITH TOSHIBA. In April 2000, we entered into a non-exclusive technology transfer agreement with Toshiba Corporation of Japan, which provides for the transfer to us by Toshiba of the advanced manufacturing processes to be used in Fab 2. In exchange for license and technology fees and royalties, Toshiba agreed to provide us with the process recipes, know-how and patent licenses required for the use of Toshiba's proprietary 0.18 micron and 0.13 micron process technology. We have decided not to purchase Toshiba's 0.13 micron process technology and in September 2002 we purchased 0.13 micron process technology from Motorola, Inc. (as described below) because we believe that Motorola's technology more appropriately matches our technology plans for Fab 2. Subject to prior termination for cause by Toshiba, our licenses under our agreement with Toshiba are perpetual. Toshiba also agreed to train a group of our engineers and managers in its facilities in Japan and to provide on-site assistance to support the transfer of the technology. Our agreement with Toshiba does not include any non-competition arrangements. Toshiba has invested \$10 million in our equity and acquired 772,667 ordinary shares as part of its technology partnership agreement. We also agreed to reserve a portion of our Fab 2 capacity for Toshiba.

TECHNOLOGY AGREEMENT WITH MOTOROLA. In September 2002, we entered into a non-exclusive technology transfer agreement with Motorola, Inc., which provides for the transfer to us by Motorola of its 0.13 micron process technology to be used in Fab 2. In exchange for license and technology fees and royalties, Motorola agreed to provide us with the process recipes, know-how and patent licenses required for the use of Motorola's proprietary 0.13 micron process technology. The agreement provides for the cooperation between us and Motorola to further enhance the technology to provide compatibility with the widest range of industry-standard design tools and services. Subject to prior termination for cause by Motorola, our licenses under our technology transfer agreement with Motorola are perpetual. Our agreement with Motorola does not include any non-competition arrangements.

JOINT DEVELOPMENT AGREEMENT WITH MATSUSHITA. In June 2002, we entered into an agreement with Matsushita Electronic Inc., for the joint development of 0.18-micron embedded MICROFLASH technology. Matsushita granted to us the non-exclusive right to utilize, on a royalty-free basis, our jointly developed technology, which is based on Matsushita's 0.18 micron process technology, for foundry services or for the manufacture and sale of our own proprietary products. We granted our development partner a royalty-free, non-exclusive license with respect to our MICROFLASH technology for manufacturing semiconductor devices that utilize our jointly developed technology for its own semiconductor business.

LICENSE AGREEMENT WITH DSPG. In January 2002, we licensed from DSP Group, Inc. their Teak(R) Digital Signal Processing (DSP) core for use with our 0.18 micron process technology. Our royalty-bearing license is generally non-exclusive. Subject to DSP Group's termination of the agreement for cause, the term of our license is through December 31, 2007.

WAFER PARTNER AGREEMENTS. During the second half of 2000, we entered into a series of agreements with four wafer partners: SanDisk Corporation, Alliance Semiconductor, Macronix International, and QuickLogic Corporation. The wafer partners agreed to invest \$250 million in Fab 2; SanDisk, Alliance and Macronix each committed to invest \$75 million and QuickLogic committed to invest \$25 million in exchange for ordinary shares and credits towards the purchase of wafers from Fab 2 under the terms set forth in the agreements. We also agreed to reserve approximately 50% of our Fab 2 capacity for our wafer partners for a 10-year period. In addition, these agreements contain special pricing terms for wafer purchases made by the wafer partners on up to 80% of the Fab 2 wafer fabrication capacity committed to the wafer partners, subject to minimum holdings of our ordinary shares. In May 2002 our shareholders approved amendments to our agreements with our wafer partners relating to their third and fourth milestone payments.

To date, we have received an aggregate of \$213.8 million from our Fab 2 wafer partners through committed investments, \$166.6 million of which has been applied to the purchase of 17,601,842 ordinary shares and \$47.2 million of which has been established as long-term customer advances to be credited against purchases by the wafer partners at a rate of 7.5% through June 2005 with respect to customer advances issued in connection with the third and fourth milestone payments and thereafter all remaining credits are to be utilized at a rate of 15%.

Our wafer partners' remaining committed investment of \$36.63 million is to be made in 2003 in connection with the satisfaction of the fifth Fab 2 milestone. For discussion of the pending amendments to our investment agreements with our wafer partners, see "Pending Amendments to Our Wafer and Equity Partner Agreements" below.

INVESTMENT BY ISRAEL CORPORATION TECHNOLOGIES (ICTECH) LTD. AND OTHER FINANCIAL INVESTORS. In December 2000, Israel Corporation Technologies (ICTech) Ltd., our current principal shareholder and one of Israel's major holding companies, agreed to invest \$50 million in several closings contemporaneous with the closings with the wafer partners through its wholly-owned subsidiary, ICTech. To date, we have received an aggregate of 42.7 million from ICTech through committed investments, which has been applied to the purchase of 4,855,595 of our ordinary shares. ICTech's final installment of \$7.3 million is to be made in connection with the satisfaction of the fifth milestone.

In February 2001, the Challenge Fund-Etgar II, a Delaware venture capital partnership, agreed to invest \$5 million in our company on substantially the same terms as Israel Corporation Technologies (ICTech) Ltd. To date, we have received an aggregate of \$4.3 million from Challenge through committed investment, which has been applied to the purchase of 480,759 of our ordinary shares. The Challenge Fund's final installment of \$733,000 is to be made in connection with the satisfaction of the fifth milestone.

In May 2002, our shareholders approved amendments to our agreements with our financial investors relating to their third and fourth milestone payments.

As of the date of this annual report, the remaining amount to be invested by our Fab 2 wafer and equity financing partners, as detailed above, in order to satisfy their total committed investment obligations amounting to an aggregate of \$305 million pursuant to the Fab 2 investment agreements is \$44.7 million to be received upon the achievement of the fifth milestone (successful production of 5,000 wafer starts per month for two full consecutive months).

For a discussion of the pending amendments to our investment agreements with our equity partners, see "Pending Amendments to Our Wafer and Equity Partner Agreements," below.

INVESTMENT BY ONTARIO TEACHERS' PENSION PLAN BOARD. In July 2002, Ontario Teachers' Pension Plan Board (OTPP), a Canadian institutional investor managing approximately 70 billion Canadian dollars in assets (as of December 31, 2002), agreed to purchase from us for \$15 million 3 million ordinary shares and 1,350,000 warrants with an exercise price of \$7.50 exercisable for four years from the date of issuance. The investment of OTPP was conditioned upon our raising at least an additional \$15 million by October 31, 2002, which we satisfied through our sale of ordinary shares and warrants pursuant to a distribution of rights to our shareholders and certain employee option holders in September 2002. Pursuant to the share purchase agreement with OTPP, we have agreed to file a registration statement with the SEC and the Israel Securities Authority to register the resale of the shares and warrants issued to OTPP, which we will file after we file this annual report. OTPP has agreed not to sell the shares and warrants purchased in connection with the share purchase agreement until the end of July 2003.

PENDING AMENDMENTS TO OUR WAFER AND EQUITY PARTNER AGREEMENTS. In March 2003, we reached an agreement with our major Fab 2 investors, who have agreed to advance a substantial portion of the fifth and final Fab 2 milestone payment prior to our meeting the milestone. Under the terms of the amended fifth milestone payment agreements, SanDisk Corporation, Alliance Semiconductor, Macronix International, Israel Corporation Technologies and The Challenge-Etgar II Fund, will pay \$24.6 million in the aggregate following final approval of these arrangements. No earlier than August 2003, the partners will pay the remainder of the fifth milestone payment if we raise an aggregate of \$22 million additional funds for Fab 2 before the end of 2003.

In consideration for their \$24.6 million payment, our partners will be issued ordinary shares based on a \$2.983 per-share price. For the \$16.4 million remainder of their committed fifth milestone payment, our partners will be issued ordinary shares based on the price per share at which we raise the \$22 million in additional funds for Fab 2. We have also agreed to allow our wafer partners to convert up to an aggregate of \$13.2 million unutilized wafer credits which they may have as of December 31, 2005 into our ordinary shares based on the market price of the ordinary shares at that time. If the wafer partners exercise this right and are issued more than 5% in the aggregate of our shares at that time, we have agreed to offer all of our other shareholders rights to purchase our shares at the same price per share.

This amendment to the investors' investment agreements is subject to the approval of our shareholders, banks and other regulatory bodies and further provides that the Investment Center shall not have informed us that it is not continuing its funding of the Fab 2 project. Subject to the following sentence, this amendment is further subject to the receipt of the consent of our banks (i) to the postponement of the December 31, 2002 deadline by which we were required to have raised \$110 million in equity financing, and (ii) to recognize a portion of the proceeds from the initial aggregate payment of \$24.6 million in satisfaction of our obligation to raise funds. In the event that pending their approval of the terms of this amendment, our banks agree to provide interim funding in the amount of \$33 million and provided that the Investment Center has not informed us that it is not continuing its funding of the Fab 2 project, we are currently discussing with the parties to this amendment the receipt of a commitment to advance to us (i) an aggregate amount of \$13.3 million of the initial \$24.6 million payment following the receipt of such interim funding and shareholder approval of this amendment, and (ii) an additional \$213,000 in the aggregate of their fifth milestone commitments for each \$1 million of interim funding in excess of \$33 million which the banks agree to provide (but no more than \$2.5 million).

CREDIT FACILITY. In January 2001, we entered into a credit facility with two leading Israeli banks pursuant to which the banks committed to make available to us up to \$550 million of loans for the Fab 2 project; pursuant to our reduction of the total project cost of Fab 2 through the renegotiation of equipment prices and a change of equipment suppliers, we and our banks have agreed to amend the credit facility such that the total amount of loans committed by the banks has been reduced to \$500 million. The loans may be drawn down through December 2004 and are repayable in quarterly installments either: (i) over three years commencing three years after the date we receive any such draw-down and bearing interest, payable quarterly, at Libor plus 1.55% over six years commencing immediately or (ii) we can repay in quarterly installments over four years commencing two years after the date we receive any such draw down and bearing interest payable quarterly at Libor plus 1.5% over six years commencing immediately. However, as of December 31, 2002 the first option is no longer available to us, unless our banks agree to extend the period beyond that date. As of the date of this annual report, we have drawn \$274 million in loans at Libor plus 1.55%. We also must pay the banks an annual commitment fee of 0.25% of any unused portion of the facility. The banks' obligation to fund the loans is subject to satisfaction of substantially the same milestones as the wafer and equity partners, plus an additional milestone for production capacity, and to additional conditions and covenants, including restrictions on debt, a prohibition on issuance of dividends prior to 2006, limitations on a change of ownership (which generally requires that through January 2004, our three largest wafer partners not sell the shares they purchased in connection with their \$75 million investment in our shares and that Israel Corporation Technologies (ICTech) Ltd. hold at least 4.2 million of our shares during this period, with portions of the shares held by our wafer partners being released from these restrictions through January 2006) , and the required maintenance of financial ratios.

As of the date of this annual report, we are required to achieve the following production and capacity milestones under the credit facility agreement:

- o Successful production at Fab 2 of 5,000 wafer starts per month for two full consecutive months, which was to have been achieved by November 2002 (and which may be delayed by a seven and one half month grace period); and.
- o Production capacity of 15,000 wafer starts per month by September 2003 (which may be delayed by a seven and one half month grace period).
- o Production capacity of 33,000 wafer starts per month by June 30, 2005.

We do not expect to meet our production capacity milestones at Fab 2 by their prescribed completion dates.

As of the date of this annual report, our Fab 2 credit facility agreement requires us to raise the following minimum amounts from the sale of equity, wafer pre-payment agreements or dispositions of our holdings in Saifun, Azalea Semiconductor Corp. and Chip Express Corporation: \$110 million by the end of December 2002 (of which we have raised \$86.2 million to date) and an additional \$34 million by the end of December 2003.

We are currently engaged in negotiations with our banks in connection with our financing obligations. While in the past we have been successful in procuring from our banks extensions to meet our additional financing obligations beyond the dates set forth in the credit facility agreement, we cannot assure you that our banks will agree to waive any failure by us to observe covenants or satisfy conditions under the facility agreement, some of which are not in our control, or that we will be able to refinance our indebtedness if they do not. We are in the process of retaining a world leading first-tier consulting firm to review our Fab 2 plan in light of the changes that have occurred in the semiconductor market and world economy, and the capital expenditures we have made and expect to continue to make. We expect that our banks will look to the results of the report of the consultant we are retaining in evaluating the terms under which the banks will continue to fund the Fab 2 project.

If, as a result of any default, our banks were to accelerate our obligations, we would be obligated to immediately repay all loans made by the banks plus penalties, and the banks would be entitled to exercise the remedies available to them under the credit facility agreement, including enforcement of their lien against all our assets. An event of default under the credit facility and the subsequent enforcement by the banks of their remedies under the credit facility may allow our wafer partners, financial investors and the Investment Center of the State of Israel to declare a breach of our obligations to them and, based on our current available cash position, would jeopardize the Fab 2 project and our ability to continue our operations even in Fab 1.

In January 2001 we also issued the banks warrants to purchase an aggregate of 400,000 ordinary shares at a purchase price of \$6.20 per share. The bank warrants are exercisable until January 2006.

INVESTMENT CENTER GRANTS. In December 2000 the Israeli government's Investment Center approved an investment program in connection with Fab 2. The approval certificate provides for government grants at a rate of 20% of qualified investments up to \$1.25 billion, for total grants of up to \$250 million, subject to customary conditions, including a requirement that approximately \$400 million of our Fab 2 funding consist of paid-in-capital. The approval certificate also provides for a tax holiday on all taxable income related to Fab 2 for the first two years of profitable operations. As of December 31, 2002, we have received approximately \$84.2 million in grants from the Investment Center, and raised \$261.3 million as paid in capital towards the \$400 million.

Due to later than planned commencement of construction of Fab 2 and prevailing market conditions, through 2005. Israeli law limits the ability of the investment center to extend the five-year investment limitation. We have notified the Investment Center of our revised investment schedule and it is currently being evaluated by the investment center. We have also informed the investment center of our reduced rate of annual investments and our lower than projected expectations for Fab 2 sales. While we have always ultimately been successful in concluding arrangements with the investment center, we cannot assure you that we will be successful in reaching arrangements with the investment center with respect to the remaining portion of our grants, which may result in the cancellation of all or a portion of our grants.

The total funding for Fab 2 committed by our equity and wafer partners, the Investment Center and our banks is approximately \$1.082 billion. We expect to fund the balance of the \$1.5 billion anticipated cost to complete the Fab 2 project from some or all of the following sources: cash flow from Fab 1 and Fab 2 operations (if they will generate positive cash flow), proceeds from the sale of shares of companies in which we own equity, additional investment from one or more equity or wafer partners and/or the sale of our ordinary shares or debt convertible into ordinary shares in a private or public offering of equity, disposition of certain of our assets, and through the lease of some of our specialized semiconductor fabrication equipment. In addition, our Fab 2 business plan assumes our receipt of additional government grants for investments in Fab 2 in excess of \$1.25 billion; however, our government grants are currently limited to \$250 million, and there is no assurance that we will be entitled in the future to any additional grants. We have registered liens in favor of the banks on substantially all of our present and future assets. The agreements with our banks restrict our ability to place liens on our assets (other than to the State of Israel in respect of investment grants) without the prior consent of the banks.

SALE OF UNITS. In January 2002 we completed a sale of Units in Israel, resulting in initial gross proceeds of approximately \$23.2 million. Costs associated with the offer and sale of the Units were approximately \$1.7 million. Each of the 552,899 Units sold was composed of 200 convertible debentures, four Options (Series 1) exercisable to purchase ordinary shares and one Option (Series A) exercisable to purchase 100 convertible debentures. Each debenture is NIS 1 in principal amount, and is adjusted to reflect increases in the Israeli Consumer Price Index and bears interest at a rate of 4.7% per annum, payable yearly commencing January 20, 2003. Principal is payable in four installments in January of 2006 through 2009. Prior to December 31, 2008, the debentures are convertible into ordinary shares at a conversion rate of one ordinary share per NIS 41 principal amount of debentures. The debentures are unsecured and are subordinated to the rights of the banks under our credit facility agreement. Each Option (Series A) was exercisable for 100 convertible debentures prior to March 20, 2002 for an exercise price of NIS 85. All of the Options (Series A) have fully expired without being exercised. Each Option (Series 1) is exercisable into one ordinary share prior to January 20, 2006 for an exercise price of NIS 39, linked to the Israeli Consumer Price Index. The debentures and options have been listed to trade only on the Tel Aviv Stock Exchange; any ordinary share issued upon conversion of debentures or exercise of options will be traded on both the Tel Aviv Stock Exchange and NASDAQ. As of December 31, 2002, we had NIS 110,579,800 in convertible debentures and 2,211,596 Options (Series 1) were outstanding.

RIGHTS OFFERING. In September 2002 we distributed transferable rights to our shareholders and certain of our employees to purchase up to an aggregate of 6,858,469 of our ordinary shares and 3,086,311 warrants to purchase our ordinary shares. One right was distributed for each 4.94 ordinary shares or employee options that were held on the record date by our shareholders and employees. Each full right entitled our shareholders and employees to purchase, at a subscription price of \$5.00, one ordinary share and 0.45 of a warrant. Each whole warrant is exercisable into one ordinary share, at an exercise price of \$7.50. The rights were exercisable until October 23, 2002. The rights offering resulted in initial gross proceeds of approximately \$20.5 million. Costs associated with the offer and sale of the rights were approximately \$0.8 million. The ordinary shares issuable upon exercise of the rights have been listed to trade on the NASDAQ-National Market and the Tel Aviv Stock Exchange; all warrants issued in connection with the rights offering are exercisable until October 31, 2006 and have been listed to trade on the Tel Aviv Stock Exchange and NASDAQ SmallCap Market.

RESEARCH AND DEVELOPMENT, PATENTS AND LICENSES

Our research and development activities have related primarily to our process development and microFLASH module design efforts, and have been sponsored and funded by us with some participation by the Israeli government. Research and development expenses for the years ended December 31, 2002, 2001 and 2000 were \$17 million, \$9.6 million and \$9.0 million net of government participation of \$1.2 million, \$1.4 million and \$1.3 million, respectively. We have also incurred costs in connection with the transfer of Toshiba and Motorola technology for use in Fab 2, some of which will be amortized over the estimated life of the technology when Fab 2 operations begin (see also in this Item "Critical Accounting Policies - Depreciation and Amortization of Fab 2 Assets).

IMPACT OF INFLATION AND CURRENCY FLUCTUATIONS

The dollar cost of our operations in Israel is influenced by the timing of any increase in the rate of inflation in Israel and the extent to which such increase is not offset by the devaluation of the NIS in relation to the dollar. During 2002, the NIS was devalued against the dollar by 7.3%, while the consumer price index in Israel increased by 6.5%.

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 dollar or if the timing of such devaluation lags behind inflation in Israel.

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

Our borrowings, including the loans contemplated under our Fab 2 credit facility, provide for interest based on a floating Libor rate, and we are therefore subject to exposure to interest rate fluctuations. We regularly 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 and exchange rate fluctuations which may increase the cost of our activities, particularly our construction and equipping of Fab 2.

The quantitative and qualitative disclosures about market risk in Item 11 of this report are incorporated herein by reference.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

DIRECTORS AND SENIOR MANAGEMENT

Set forth below is information regarding our directors and the members of our administrative, supervisory or management bodies.

NAME	AGE	POSITION
Idan Ofer.....	49	Chairman of the Board (through June 1, 2003) and Director
Carmel Vernia.	50	Chairman of the Board and Director and Acting Chief Executive Officer (pending election by the General Meeting of Shareholders)
Dr. Rafael M. Levin.....	55	Co-Chief Executive Officer (through June 1, 2003)
Dr. Yoav Nissan-Cohen...	53	Co-Chief Executive Officer (through June 1, 2003) and Director (through March 2003)
Ehud Hillman.....	50	Vice Chairman, Director
Dr. Eli Harari.....	58	Director
Miin Wu.....	56	Director
N.D. Reddy.....	64	Director
Hans Rohrer.....	53	Outside Director
Zehava Simon.....	45	Outside Director
Amir Harel.....	41	Vice President and Chief Financial Officer
Harold Blomquist.....	50	Senior Vice President of Business Operations for Tower Semiconductor Ltd., Chief Executive Officer, Tower Semiconductor USA
Dr. Itzhak Edrei.....	44	Vice President of Research and Development
Danny Hacoheh	46	Vice President of Sales Europe, Asia and Japan
Erez Taoz.....	48	Vice President, Fab 2 General Manager
Eli Lazar.....	52	Vice President of Human Resources, Logistics and Information Systems
Ron Niv.....	51	Senior Director
Aviram Matosevich.....	44	Vice President of Customer Engineering and QAR
Sergio Kusevitzky.....	45	Vice President of IP and Design Services
Rafi Mor.....	39	Senior Director, Fab 1 Manager
Doron Simon.....	37	President, Tower Semiconductor USA
Ishai Naveh (Nachumovsky)	45	Vice President of Technology, Tower Semiconductor USA

IDAN OFER joined our Board of Directors in June 1999, and was appointed Chairman of the Board in January 2000 and elected as Chairman of the Board at the Annual Meeting of Shareholders in November 2000. Mr. Ofer serves on the Stock Option and Compensation Committee. Mr. Ofer has served as Chairman of the Board of Directors of Israel Corp., our current principal shareholder, since April 1999. Mr. Ofer also serves as a director of several public subsidiaries of Israel Corp. In addition to his positions within Israel Corp., Mr. Ofer currently serves as Chairman of the Board of Bank Hamizrachi, has held managerial positions with several shipping companies and has served as a director of several companies engaged in venture capital and energy projects. Mr. Ofer has announced his intention to resign as Chairman of our Board of Directors effective June 1, 2003.

CARMEL VERNIA has been designated by our Audit Committee and Board of Directors to serve as the Chairman of our Board of Directors and acting Chief Executive Officer commencing June 1, 2003, in place of our outgoing Co-Chief Executive Officers. From 2000 to 2002, Mr. Vernia served as the Chief Scientist in the Government of Israel's Ministry of Industry and Trade. Previous to that, he spent 16 years with Comverse Technology in various positions, culminating with his appointment to the dual positions of Chief Operating Officer of Comverse and Chief Executive Officer of Verint Systems. Mr. Vernia earned a master's degree in electrical and computer engineering from the University of California, Davis and a bachelor's degree in electrical engineering from the Technion - Israel Institute of Technology. Mr. Vernia's appointment as Chairman of the Board and Acting Chief Executive Officer is subject to shareholder approval.

DR. RAFAEL M. LEVIN has been our Co-Chief Executive Officer since June 1995. From June 1993 to June 1995, Dr. Levin was our Vice President and Chief Operating Officer and from March 1993 through June 1993, Dr. Levin served as our Operations Manager. From 1984 through March 1993, he was employed by National at the Migdal Haemek facility in various capacities, including Manufacturing Services Manager, Foundry Marketing Manager, and Product Engineering Manager. Dr. Levin tendered his resignation in March 2003, which shall enter into effect as of June 1, 2003.

DR. YOAV NISSAN-COHEN has been our Co-Chief Executive Officer since June 1995 and served as a member of our Board from January 2001 to March 2003. From June 1993 to June 1995, Dr. Nissan-Cohen was Vice President, Technology and Business Development. From March 1993 to June 1993, Dr. Nissan-Cohen was Director, Technology and Business Development. From 1988 through March 1993, Dr. Nissan-Cohen was employed by National at the Migdal Haemek facility in various capacities, including Product Engineering Manager and Quality Assurance Manager. Dr. Nissan-Cohen tendered his resignation in March 2003, which shall enter into effect as of June 1, 2003.

EHUD HILLMAN served on our Board from October 1996 through August 1999 and was reappointed to the Board in January 2000. In January 2001 Mr. Hillman was appointed Vice Chairman of the Board. Mr. Hillman serves on the Finance Committee, Tender Committee and Fab 1 Steering Committee. Since March 2001 Mr. Hillman has served as Chief Executive Officer of ICTech, the technology holding company of Israel Corp. Mr. Hillman served as Chief Financial Officer of Israel Corp. from September 1996 to 2001 and as Executive Vice President and Chief Financial Officer of Israel Corp. from May 1997 to 2001. Mr. Hillman served as a director of several subsidiaries of Israel Corp., including Israel Chemicals Ltd., ZIM Israel Navigation Company and others. Prior thereto, Mr. Hillman was Vice President and Controller of Clal Industries Ltd. and a director of several companies in the Clal Group.

DR. ELI HARARI joined our Board in January 2001. Dr. Harari serves on the Finance Committee and the Stock Option and Compensation Committee. Dr. Harari, the founder of SanDisk Corporation, has served as President and Chief Executive Officer and as a director of SanDisk since 1988. In 1983, Dr. Harari founded Wafer Scale Integration (WSI), a privately held semiconductor company, acquired by ST Microelectronics in 2000, and served as WSI's President and Chief Executive Officer from 1983 to 1986 and as Chairman and Chief Technical Officer from 1986 to 1988.

MIIN WU joined our Board in January 2001. Mr. Wu serves on the Finance Committee. Mr. Wu serves as President, Chief Executive Officer and an Executive Director of Macronix International. Mr. Wu has been an executive officer of Macronix since its formation in 1989. Mr. Wu received both a B.S. and an M.S. in Electrical Engineering from National Cheng-Kung University in Taiwan as well as an M.S. in Material Science & Engineering from Stanford University.

N.D. REDDY joined our Board in January 2001. Mr. Reddy serves on the Finance Committee and the Audit Committee. Mr. Reddy is the co-founder of Alliance Semiconductor Corporation, a publicly traded semiconductor company, and has served as its Chairman, President and Chief Executive Officer from its inception in February 1985. Mr. Reddy also served as Alliance's Chief Financial Officer from June 1998 to January 1999. From September 1983 to February 1985, Mr. Reddy served as President and Chief Executive Officer of Modular Semiconductor, Inc., and from 1980 to 1983, he served as manager of Advanced CMOS Technology Development at Synertek, Inc., a subsidiary of Honeywell, Inc. Prior to that time, Mr. Reddy held various research and development and management positions at Four Phase Systems, a subsidiary of Motorola, Inc., Fairchild Semiconductor and RCA Technology Center. He holds an MS degree in Electrical Engineering from North Dakota State University and an MBA from Santa Clara University. Mr. Reddy is also a director of Sage, Inc. and eMagin Corporation, two publicly traded companies.

ZEHAVA SIMON joined our Board in September 1999. Ms. Simon serves as Chairperson of our Audit Committee and serves as a member of our Finance Committee, Stock Option and Compensation Committee and Tender Committee. Since 2000, Ms. Simon has served as Vice President of Operations and Israel site manager for BMC Software Israel. From 1998 to 2000, Ms. Simon was the Israel Business Development Manager for Intel. From 1993 to 1998, Ms. Simon served as Intel's Finance and Administration Manager for Israel. Ms. Simon serves as an outside director on our Board for a fixed term which expires in 2004.

HANS ROHRER joined our Board in April 2002. Mr. Rohrer serves as a member of our Audit Committee. Mr. Rohrer has over 25 years of experience in the semiconductor industry. Mr. Rohrer started his career in the semiconductor industry with Texas Instruments and has held various engineering, marketing, sales and general management positions, including Vice President and General Manager, Europe, with National Semiconductor between 1980 and 1998. From 1999 to 2002, Mr. Rohrer served as President of Taiwan Semiconductor Manufacturing Company-Europe (TSMC-Europe).

AMIR HAREL joined Tower in December 1998 and assumed the office of Vice President and Chief Financial Officer in January 1999. From July 1994 through November 1998, Mr. Harel was Secretary and Chief Financial Officer of Elbit Vision Systems Ltd. From December 1988 through June 1994, Mr. Harel held various finance management positions at Elbit Ltd.

HAROLD A. BLOMQUIST joined Tower in February 2003 as our Senior Vice President of Business Operations. Mr. Blomquist also serves as Chief Executive Officer of our wholly-owned U.S. subsidiary, Tower Semiconductor USA. Mr. Blomquist serves as a director of Simtek and as a consultant to venture investors and early stage technology companies particularly in the semiconductor and electronic components areas. Before joining us, Mr. Blomquist served in senior positions in the semiconductor industry, including President and CEO of ZMD America, Inc., Senior Vice President of AMI Semiconductor, and in various responsible positions at Texas Instruments, Inmos and General Semiconductor. Mr. Blomquist was granted a BSEE degree from the University of Utah, double-majoring in Business Management and also attended the University of Houston, where he pursued a joint Juris Doctor/MBA course of study.

DR. ITZHAK EDREI was appointed Vice President of Research and Development in August 2001, 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.

DANNY HACOHEN was appointed Vice President of Sales for Europe, Asia and Japan in 2002, having served as Director thereof since 1996. Prior thereto, Mr. Hacohen served as Fab1 Expansion Project Manager from 1993 to 1996 and from 1986 to 1993 Mr. Hacohen was employed by National Semiconductor as Director of Materials and Logistics.

EREZ TAOZ was appointed Vice President and Fab 2 General Manager in March 2003, having served as VP and Fab 1 general manager since August 2001 and as Director of Fab 1 since 1999. Mr. Taoz joined Tower in 1996 as our Director of Manufacturing. Prior to that time, Mr. Taoz served as Director of Manufacturing at Cyclone Aviation Products.

ELI LAZAR was appointed Vice President of Human Resources, Logistics and Information Systems, having served as Director thereof since 1996. Prior thereto, Mr. Lazar had over 15 years of experience as Vice General Manager at the College of Management and as Human Resources Manager at the National Semiconductor Design Center at Hertzliya.

RON NIV currently serves as a Senior Director after serving as Fab 2 Manager from May 2000 to March 2003. From July 1999 to May 2000, Mr. Niv served as Director of our Design Center at Netanya. From 1996 to 1999, Mr. Niv served as our NVM Technology (EPROM and Flash) Program Manager. Mr. Niv was the Fab 2 Project Manager from 1995 to 1996 and Manufacturing Services Manager from 1993 to 1995.

AVIRAM MATOSEVICH was appointed Vice President of Customer Engineering and QAR in March 2003, having served as our Director of Customer Support since 2000. From 1996 to 2000 Mr. Matosevich served as the Application Manager in our U.S. office. From 1993 to 1996, Mr. Matosevich served as our Manager of Reliability and Product Engineering. From 1987 to 1993, Mr. Matosevich was employed by National Semiconductor in various engineering and management capacities.

SERGIO KUSEVITZKY was appointed Vice President of IP and Design Services in 2003. Mr. Kusevitzky previously served at Wafer Scale Integration as the General Manager of the Israeli Design Center and was actively involved in the ST Microelectronics acquisition of WSI. Mr. Kusevitzky was a co-founder of Oren Semiconductor in 1994 and served our company in various management positions until 1998. From 1985 through 1994, Mr. Kusevitzky was with Zoran Microelectronics Ltd.

RAFI MOR was appointed Senior Director and Fab 1 Manager in March 2003. From Nov 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.

DORON SIMON has been President of Tower Semiconductor USA since April 2001. Since 1993, Mr. Simon has served in various capacities, including our Director of Customer Service, Director of our Planning and Turn Key Operations and Director of our World Wide Sales Operations. Prior to 1993, Mr. Simon was employed by National in Migdal Haemek as their Production Control Manager.

ISHAI NAVEH (NACHUMOVSKY) was appointed Vice President of Technology for Tower Semiconductor USA in October 2002, having served as Director of NVM Technology and Senior Director of Foundry Technologies in Tower Semiconductor LTD since 1997. Mr. Naveh has been employed by Tower since 1993, initially as our Manager of Product Test and Reliability. Mr. Naveh was employed by National in Migdal Haemek from 1984 to 1993 in the areas of Process and Product Engineering.

COMPENSATION

During 2002 we paid to all our directors and senior management as a group an aggregate of \$1.4 million in salaries, fees and bonuses (excluding management service fees. See "Item 7 - Major Shareholders and Related Party Transactions"). The total amount set aside or accrued in 2002 to provide for severance, retirement and similar benefits for such persons was \$0.3 million. No directors received cash compensation other than the annual and meeting fees meeting fees described below. As of December 31, 2002, our directors were granted options to purchase an aggregate of 280,000 ordinary shares at a weighted average exercise price of \$8.48. These options will become exercisable according to various vesting schedules over four years and generally remain exercisable for five years following the vesting date.

During 2002, we granted a total of 135,000 options to purchase ordinary shares to our senior managers as a group (other than Dr. Levin and Dr. Nissan-Cohen - see "Share Ownership" below). These options have a weighted average exercise price of \$5.91 per share and expire between January 2012 and July 2012.

Since October 2001, the directors have foregone their directors' fees, except for fees required by law to be paid to our outside directors, consisting of NIS 26,000 (approximately \$5,530) annual fee plus NIS 915 (approximately \$195) per meeting. The aggregate amount payable to all the directors with respect to 2002 was approximately \$20,000. The annual and per meeting fees paid to all our directors are adjusted semiannually to reflect changes to the published guidelines in Israel for outside directors.

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 hold office until their successors are elected at the next annual general meeting of shareholders. Pursuant to a shareholders agreement described in "Item 7. Major Shareholders and Related Party Transactions" of this annual report, Israel Corp., SanDisk Corporation, Alliance Semiconductor Corporation and Macronix Corporation have agreed to vote all their respective shares for nominees designated by each shareholder, and for the election of a nominee of Israel Corp. as Chairman of the Board. Our officers are appointed by the Board of Directors and (subject, in certain cases, to employment agreement provisions that require 270 days notice of termination) continue to serve at the discretion of the Board of Directors.

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, whether or not already a director, may act as an alternate, and the same person may act as the alternate for several directors. 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.

None of the members of the Board is entitled to receive any severance or similar benefits upon termination of his service with the Board of Directors, other than Dr. Nissan-Cohen, who is entitled to severance as an employee under Israeli law.

Pursuant to Israeli law we are required to appoint two outside directors. These directors must be unaffiliated with us and our principals. Any committee of the Board of Directors which is authorized to exercise any function of the board must include at least one outside director.

Outside directors are to be elected by a majority vote at a shareholders' meeting, provided that such majority includes at least one-third of the shares held by non-controlling shareholders voted at the meeting; or the total number of shares held by non-controlling shareholders voted against the election of the director does not exceed one percent of the aggregate voting rights in the company.

The initial term of an outside director is three years and may be extended for an additional three years. Outside directors may be removed only by the same percentage of shareholders as is required for their election, or by a court, and then only if the outside directors cease to meet the statutory qualifications for their appointment or if they violate their duty of loyalty to the company.

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

The Companies Law requires public companies to appoint an audit committee. The responsibilities of the audit committee include identifying irregularities in the management of the company's business and approving related party transactions as required by law. An audit committee must consist of at least three directors, including the outside directors of 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, may not be a member of the audit committee.

Under the Companies Law, the board of directors must appoint an internal auditor, 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 new Companies Law, the internal auditor may be an employee of the company but not an office holder, or an affiliate, or a relative of an office holder or affiliate, and he may not be the company's independent accountant or its representative.

Ms. Simon, who currently serves as an outside director, was appointed under a predecessor law to a fixed five-year term, which expires in September 2004. Mr. Rohrer, who currently serves as an outsider director, was appointed under the current Companies Law, with an initial three-year term expiring in April 2005. Both Ms. Simon and Mr. Rohrer serve on our Audit Committee.

Mr. Ofer, Dr. Harari and Ms. Simon serve on the Stock Option and Compensation Committee. The committee meets at least once a year. The primary function of our Stock Option and Compensation Committee is to approve our employee compensation policy and determine remuneration and other terms of employment for our officers and senior employee. In setting our remuneration policy, the committee considers a number of factors including:

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

EMPLOYEES

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

	YEAR ENDED DECEMBER 31,		
	2002	2001	2000
Process and Product Engineering, R&D.....	375	299	183
Manufacturing. Operations.....	94	78	306
Manufacturing Support.....	189	154	191
Administration, Marketing, Finance.....	99	108	109
Fab 2 Construction & Technology Transfer.....	438	409	142
Total.....	1,195	1,048	931

We also use temporary employees as necessary. During 2002, we used on average approximately 84 temporary employees

Except for an arrangement regarding pension contributions, we have no collective bargaining agreements with any of our employees. However, by administrative order, certain provisions of the collective bargaining agreements between the Histadrut (General Federation of Labor in Israel) and the Coordination Bureau of Economic Organizations, relating primarily to the length of the work day, minimum wages, pension contributions, insurance for work-related accidents, procedures for dismissing employees, determination of severance pay and other conditions of employment are applicable to our employees. In accordance with these provisions, the salaries of our employees are partially indexed to the Consumer Price Index in Israel.

We generally provide our employees with benefits and working conditions beyond the minimum requirements. We consider our relationship with our employees to be satisfactory.

SHARE OWNERSHIP

All of the persons listed above under the caption "Directors and Senior Management" own ordinary shares and/or options to purchase ordinary shares. Such persons (other than Dr. Levin and Dr. Nissan-Cohen) are the beneficial owners of an aggregate of 22,799 shares and options to purchase an aggregate of 1,032,249 ordinary shares at a weighted average exercise price of \$11.03 per share, expiring April 2005 through July 2012. Except as set forth below, none of such persons owns shares and/or options amounting to 1% or more of the outstanding ordinary shares. Dr. Levin is the beneficial owner of options to purchase 411,916 ordinary shares at a weighted average exercise price of \$8.23 per share, expiring April 2005 through May 2011. Dr. Nissan-Cohen is the beneficial owner of options to purchase 411,096 ordinary shares of Tower at a weighted average exercise price of \$8.23 per share, expiring April 2005 through May 2011. Information regarding our share option plans presented in Note 14B to our consolidated financial statements is incorporated herein by reference.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

MAJOR SHAREHOLDERS

The following table and notes thereto set forth information, as of March 31, 2003, concerning the beneficial ownership (as defined in Rule 13d-3 under the Securities Exchange Act of 1934) and on a diluted basis of ordinary shares by any person who is known to own at least 5% of the ordinary shares of our company. On such date 43,435,532 ordinary shares were issued and outstanding. The voting rights of our major shareholder do not differ from the voting rights of other holders of our ordinary shares. However, certain of our major shareholders are party to a shareholders agreement as a result of which they may be able to exercise control over matters requiring shareholder approval, including the election of directors and approval of significant corporate transactions.

Except as otherwise indicated, all information in the following table has been given based on the agreements with our wafer and equity partners as currently in effect. Notes to the table which give effect to the proposed amended fifth milestone payment are based on the proposed \$2.983 per share price for the first portion of the payment and an assumed price per share of \$4.00 per share for the second portion. For additional information regarding our agreements with our wafer and equity partners and the proposed amendments, see "Item 5 - Operating and Financial Review and Prospects - Fab 2 Agreements."

IDENTITY OF PERSON OR GROUP -----	AMOUNT OWNED -----	PERCENT OF CLASS(1)(2) -----	PERCENT OF CLASS (DILUTED)(3)(4) -----
Israel Corporation Technologies (ICTech) Ltd. ("ICTech")(5) (6)	13,776,753(7)	30.72	23.52
SanDisk Corporation(6)	6,827,961(8)	15.46	11.66
Alliance Semiconductor Corporation(6)	6,791,537(9)	15.38	11.60
Macronix International Co. Ltd.(6)	6,595,795(10)	14.96	11.26
Ontario Teachers' Pension Plan Board ")	4,350,000(11)	9.71	7.43

(1) Assumes the holder's beneficial ownership of all Ordinary Shares that the holder has a right to purchase within 60 days.

(2) If the proposed amendments to the fifth milestone payment are approved, percent of class would be as follows: ICTech, 33.14; SanDisk, 20.75; Alliance, 20.67; Macronix, 20.28; and OTPP, 9.71.

(3) Assumes that all currently outstanding rights to purchase Ordinary Shares have been exercised by all holders.

(4) If the proposed amendments to the fifth milestone payment are approved percent of class (diluted) would be as follows: ICTech, 22.25; SanDisk, 14.13; Alliance, 14.07; Macronix, 13.79; and OTPP, 6.29.

(5) On January 31, 2001, Israel Corp. transferred all its beneficial ownership of shares of Tower to ICTech.

(6) Pursuant to a shareholders agreement among Israel Corp., Alliance Semiconductor Corporation, SanDisk Corporation and Macronix Co. Ltd., each of ICTech, Alliance Semiconductor Corporation, SanDisk Corporation and Macronix Co. Ltd. may be said to have shared voting and dispositive control over 72.38% (or 77.41% when taking into account the additional shares to be issued pursuant to the amended fifth milestone payment agreement) of the outstanding shares of Tower.

- (7) Based on information provided by ICTech, represents 12,366,430 shares currently owned by ICTech, a minimum of 244,445 shares and a maximum of 586,667 shares issuable pursuant to a Share Purchase Agreement, dated as of December 12, 2000, and 823,656 shares issuable upon the exercise of currently exercisable warrants.
- (8) Based on information provided by SanDisk, represents 6,100,959 shares currently owned by SanDisk, 366,690 shares issuable in connection with the fifth milestone payment (3,312,749 if the proposed amendments to the fifth milestone payment are approved) and 360,312 shares issuable upon the exercise of currently exercisable warrants.
- (9) Based upon information provided by Alliance, represents 6,067,100 shares currently owned by Alliance, 366,690 shares issuable pursuant to a Share Purchase Agreement dated as of August 30, 2000, and 357,747 shares issuable upon the exercise of currently exercisable warrants.
- (10) Based on information provided by Macronix, represents 5,932,105 shares currently owned by Macronix, 366,690 shares issuable pursuant to a Share Purchase Agreement dated as of December 12, 2000, and 297,000 shares issuable upon the exercise of currently exercisable warrants.
- (11) Based on information provided by OTPP, represents 3,000,000 shares currently owned by OTPP and 1,350,000 shares issuable upon the exercise of currently exercisable warrants issued pursuant to a Share Purchase Agreement dated July 23, 2002.

Pursuant to a shareholders agreement dated as of January 18, 2001, among Israel Corp., Alliance Semiconductor, SanDisk and Macronix, such parties have agreed, among other things, to vote or cause to be voted all their respective shares for the election to the Board of Directors of nominees designated by each party, for nominees recommended by the Board, and for the election of a designee of the Israel Corp. to serve as Chairman of the Board, as well as to vote against the election of any other persons to the Board of Directors. In addition, subject to certain exceptions, each shareholder has agreed to restrictions on transfer of its shares for three years and to maintain a minimum share ownership for five years. The shareholders agreement also provides for certain rights of first refusal.

As of March 19, 2003, there were a total of 36 holders of record of our ordinary shares, of which 25 were registered with addresses in the United States. Such United States holders were, as of such date, the holders of record of approximately 46.7% of the outstanding ordinary shares.

RELATED PARTY TRANSACTIONS

INVESTMENT AGREEMENT WITH ICTECH AND THE MAJOR WAFER PARTNERS. Prior to the consummation of our rights offering in September 2002, we reached an agreement with ICTech, SanDisk Corp., Alliance Semiconductor Corp. and Macronix International Co., Ltd. (ICTech and the Major Wafer Partners) pursuant to which, in connection with the rights offering, ICTech invested \$9.2 million, each of SanDisk and Alliance invested \$4 million, and Macronix invested \$3.3 million in consideration for a total of 4,086,038 ordinary shares and warrants to purchase an additional 1,838,715 ordinary shares. In connection with the rights offering, each full right entitled its recipient to purchase, at a subscription price of \$5.00, one ordinary share and 0.45 of a warrant. Each whole warrant is exercisable into one ordinary share, at an exercise price of \$7.50 and may be exercised until October 31, 2006. ICTech and the Major Wafer Partners received certain registration rights and pre-emptive rights. ICTech and the Major Wafer Partners have agreed to refrain from transferring any of the purchased securities for a period of 270 days from their issuance to them. Each of our shareholders and certain employee option holders were given an opportunity to purchase ordinary shares and warrants on the same terms. These agreements were approved by our audit committee, our board of directors and our shareholders.

AMENDMENT TO SHARE PURCHASE AGREEMENTS WITH WAFER PARTNERS AND EQUITY PARTNERS. On March 31, 2002, we entered into agreements with SanDisk Corp., Alliance Semiconductor Corp., Macronix International Co., Ltd. and with our equity partners, Israel Corporation Technologies (ICTech) Ltd. and the Challenge Fund and on May 29, 2002, we entered into an agreement with QuickLogic Corp., in which these partners committed to make their respective third and fourth Fab 2 milestone payments prior to the achievement of the milestones. In consideration of our partners advancement of the milestone payments, our agreements with all of our wafer and equity partners were modified to issue our wafer partners ordinary shares equivalent to sixty percent of the aggregate amount of the third and fourth milestone payments divided by the lower of the 30-day average trading price of our ordinary shares and \$12.50 per share, and to establish the remaining forty percent of the advanced payments as credits toward future wafer purchases from Fab 2, and the equity partners would be issued ordinary shares equivalent to the aggregate amount of the third and fourth milestone payments divided by the lower of the 30-day average trading price and \$12.50 per share. These agreements were approved by our audit committee, our board of directors and our shareholders.

AMENDMENT TO SHARE PURCHASE AGREEMENTS WITH CERTAIN WAFER PARTNERS. In November 2001, we amended the share purchase agreements of SanDisk, Alliance and Macronix to provide for the conversion of \$53.7 million wafer purchase credits into our ordinary shares at a price of \$12.75 per share. All other provisions of the share purchase agreements, apart from those detailed in the previous paragraph, remained substantially unchanged. The amendment was approved by our Board of Directors and Audit Committee in September and by our shareholders in November 2001.

AMENDMENT TO SHARE PURCHASE AGREEMENTS WITH WAFER PARTNERS AND EQUITY PARTNERS. In March 2003, we reached an agreement with our major shareholders, who have now agreed to advance a substantial portion of the fifth and final Fab 2 milestone payments prior to the contractually committed date. Under the terms of the amended fifth milestone payment agreements, SanDisk Corporation, Alliance Semiconductor, Macronix International, Israel Corporation Technologies (ICTech) and The Challenge-Etgar II Fund, will pay \$24.6 million in the aggregate following final approval of these arrangements, which we expect to occur in April 2003, subject to the final amendment to the facility agreement. No earlier than August 2003, the major shareholders will pay the remainder of the fifth milestone payment if we raise an aggregate of \$22 million, before the end of 2003.

In consideration for this \$24.6 million, the partners will be issued ordinary shares based on a \$2.983 per-share price. For the remainder, the partners will be issued ordinary shares based on the price per share at which we raise the additional funds. We have also agreed to allow our wafer partners to convert up to an aggregate of \$13.2 million unutilized wafer credits which they may have as of December 31, 2005 into our ordinary shares based on the shares market price at that time. If the wafer partners exercise this right and are issued more than 5% in the aggregate of our shares at that time, we will then offer all of its other shareholders rights to purchase its shares at the same price per share. This amendment to the investors' investment agreements is subject to the approval of our shareholders, banks and other regulatory bodies.

EXPENSE REIMBURSEMENT AGREEMENT WITH ISRAEL CORP. In March 2002, we entered into an agreement with Israel Corp., the parent company of Israel Corporation Technologies (ICTech), pursuant to which, Mr. Ehud Hillman, a Director of our company, provides management services in consideration of an annual fee of \$240,000 with payment for services provided as of January 2001. The term of this agreement for one year with automatic renewal for successive one-year periods thereafter, unless prior terminated by one of the parties. Our Audit Committee, Board of Directors and shareholders duly approved this agreement.

GRANT OF OPTIONS TO EHUD HILLMAN. In September 2001, we granted to Ehud Hillman, a member of our Board of Directors and an officer of Israel Corp., options to purchase up to 21,500 ordinary shares at an exercise price of \$10.75 per share. These options vest over two years, one third vesting unconditionally on the date of grant, and one third on vesting on each of the first and the second anniversary of the grant, subject to Mr. Hillman's rendering of services as requested by our Board. All of options granted will remain exercisable for a period of three years from the date of vesting. The grant was approved by the Audit Committee and the Board and was approved by shareholder vote in November 2001.

GRANT OF OPTIONS TO CO-CEOS. In May 2001 the Board of Directors granted each of Dr. Nissan-Cohen and Dr. Levin options to purchase up to 100,000 ordinary shares for an exercise price of \$11.81, the market price for the ordinary shares on the date of grant. These options vest over a four-year period and remain exercisable for ten years.

GRANT OF OPTIONS TO DIRECTORS. During 2001, the Audit Committee, Board of Directors and shareholders approved a stock option plan pursuant to which our Board members will be granted options to purchase up to 400,000 ordinary shares. As of December 2002, 280,000 options to purchase ordinary shares, of which 240,000 options were exercisable at an exercise price of \$8.88 per share, and 40,000 options were exercisable at an exercise price of \$6.08 per share, were outstanding under the plan. These options vest over a four-year period, according to various vesting schedules and are generally not exercisable following the fifth anniversary of their vesting date.

INDEMNIFICATION AGREEMENTS WITH DIRECTORS. In December 2001, we entered into indemnification agreements with the members of our Board of Directors pursuant to which, subject to the limitations set forth in the Israel Companies Law and our 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. Such indemnification will be limited to up to 25% of the then current fully paid-in-equity of the Company (in addition to any amounts paid under insurance) with respect to specified events, in each case of indemnification (including all matters connected therewith). The agreements were approved by our shareholders at the general meeting of the shareholders in November 2001 after approval of our Audit Committee and our Board of Directors.

ITEM 8. FINANCIAL INFORMATION

Our consolidated financial statements are incorporated herein by reference to pages F-1 through F-35.

ITEM 9. THE OFFER AND LISTING

MARKETS AND SHARE PRICE HISTORY

The primary trading market for our ordinary shares is the Nasdaq National Market, where our shares are listed and traded on the 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 National Market:

PERIOD	HIGH (\$)	LOW (\$)
March 2003.....	2.78	2.20
February 2003.....	3.2	3.20
January 2003.....	3.4	3.22
December 2002.....	5.44	3.81
November 2002.....	5.05	3.37
October 2002.....	3.87	3.40
September 2002.....	5.2	3.22
First Quarter 2003.....	3.40	2.19
Fourth Quarter 2002.....	5.44	3.20
Third Quarter 2002.....	5.7	3.4
Second Quarter 2002.....	6.69	5.26
First Quarter 2002.....	8.07	5.34
Fourth Quarter 2001.....	6.6	4.10
Third Quarter 2001.....	11.22	5.70
Second Quarter 2001.....	12.9	7.8
First Quarter 2001.....	16.75	8.94
2002.....	8.07	3.22
2001.....	17.125	10.375
2000.....	43.50	6.125
1999.....	13.75	5.625
1998.....	13.00	5.75

In January 2001, our shares commenced trading on the Tel Aviv Stock Exchange (TASE) in Israel under the symbol "Tower." The following table sets forth, for the periods indicated, the high and low reported sales prices, in NIS, of the ordinary shares on the Tel Aviv Stock Exchange:

PERIOD	HIGH(NIS)	LOW (NIS)
-----	-----	-----
March 2003.....	13.39	10.63
February 2003.....	15.68	10.76
January 2003.....	16.36	15.51
December 2002.....	24.98	15.79
November 2002.....	23.41	18.24
October 2002.....	19.15	16.14
September 2002.....	24.54	18.83
First Quarter 2003	16.36	10.63
Fourth Quarter 2002.....	24.98	15.79
Third Quarter 2002.....	27.18	18.83
Second Quarter 2002.....	33.19	26.02
First Quarter 2002.....	37.50	24.63

ITEM 10. ADDITIONAL INFORMATION

ARTICLES OF ASSOCIATION; ISRAEL COMPANIES LAW

ARTICLES OF ASSOCIATION

Our shareholders approved the amendment of our Articles of Association ("Articles") in November 2000. The objective stated in the Articles is to engage in any lawful activity.

We have currently outstanding only one class of equity securities, our ordinary shares, par value NIS 1.00 per share. Holders of 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 a liquidation of the Company, 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. No business may be commenced until a quorum of two or more shareholders holding at least 33% of the voting rights is present in person or by proxy. Shareholders may vote in person or by proxy, and will be required to prove title to their shares as required by the Israeli Companies Law (the "Companies Law") pursuant to procedures established by the Board of Directors. Resolutions regarding the following matters must be passed by an ordinary majority of those voting at the general meeting:

- o amendments to our Articles;
- o appointment or termination of our auditors;
- o appointment and dismissal of directors;
- o approval of acts and transactions requiring general meeting approval under the Companies Law;
- o increase or reduction of authorized share capital or the rights of shareholders or a class of shareholders;
- o any merger as provided in section 320 of the Companies Law; and
- o the exercise of the Board of Directors' powers by 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 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. Such notice must be given at least 21 days but not more than 35 days prior to the special meeting.

THE COMPANIES LAW

We are subject to the provisions of new Israeli Companies Law, which became effective on February 1, 2000. 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 director, 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 forgoing positions without regard to such person's title. Each person listed in the table in "Item 6. Directors, Senior Management and Employees" above is an office holder. Under the Companies Law, all arrangements as to compensation of office holders who are not directors require approval of the board of directors or a committee thereof. With the exception of compensation to outside directors in an amount specified in the regulations discussed above, arrangements regarding the compensation of directors also require audit committee and shareholder approval.

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, spouse's descendants and the spouses of any of the foregoing, or by 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.

In the case of a transaction that is not an extraordinary transaction, after the office holder complies with the above disclosure requirements, only board approval is required unless the articles of association of the company provide otherwise. The transaction must not be adverse to the company's interest. If the transaction is an extraordinary transaction, then, in addition to any approval required by the Articles of Association, it also must be approved first by the audit committee and then by the board of directors, and, in specified circumstances, by a meeting of the shareholders. An office holder 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 at this meeting or vote on this 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-third 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 one percent of the voting rights in the company.

In addition, a private placement of securities that will increase the relative holdings of a shareholder that holds five percent or more of the company's outstanding share capital, assuming the exercise by such person of all of the convertible securities into shares held by that person, or that will cause any person to become, a holder of more than five percent of the company's outstanding share capital, requires approval by the board of directors and the shareholders of the company. However, subject to certain exceptions, shareholder approval will not be required if the aggregate number of shares issued pursuant to such private placement, assuming the exercise of all of the convertible securities into shares being sold in such a private placement, comprises less than twenty percent of the voting rights in a company prior to the consummation of the private placement.

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, voting in the general meeting of shareholders on the following matters:

- o any amendment to the Articles of Association;
- o an increase of the company's authorized share capital;
- o a merger; or
- o 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 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. The Companies Law requires that specified types of transactions, actions and arrangements be approved as provided for in a company's articles of association and in some circumstances by the audit committee, by the board of directors and by the shareholders. In general, the vote required by the audit committee and the board of directors for approval of these matters, in each case, is a majority of the disinterested directors participating in a duly convened meeting.

MATERIAL CONTRACTS

FAB 2 AGREEMENTS. During 2000 and through 2002, we entered into several important Fab 2 agreements and arrangements with a key technology partner, wafer and equity financing partners, the Israeli Investment Center and two leading Israeli banks. Discussions of these agreements are incorporated herein by reference to the discussion under the caption "Fab 2 Agreements" in "Item 5. Operating and Financial Review and Prospects" of this annual report and to Note 13 to the consolidated financial statements included in this annual report.

0.18-MICRON EMBEDDED MICROFLASH TECHNOLOGY JOINT DEVELOPMENT AGREEMENT. In June 2002, we entered into an agreement with Matsushita Electronic Inc., a Japanese semiconductor manufacturer for the joint development of 0.18-micron embedded MICROFLASH technology. Our development partner granted to us a royalty-free, non-exclusive license to its intellectual property with respect to its 0.18 micron process technology for manufacturing semiconductor devices that utilize our jointly developed technology in order to provide semiconductor foundry services or for our own semiconductor business. We granted our development partner a royalty-free, non-exclusive license with respect to our microFlash technology for manufacturing semiconductor devices that utilize our jointly developed technology for its own semiconductor business.

TECHNOLOGY AGREEMENT WITH MOTOROLA. In September 2002, we entered into a non-exclusive technology transfer agreement with Motorola, Inc., which provides for the transfer to us by Motorola of its 0.13 micron process technology to be used in Fab 2. In exchange for license and technology fees and royalties, Motorola agreed to provide us with the process recipes, know-how and patent licenses required for the use of Motorola's proprietary 0.13 micron process technology. The agreement provides for the cooperation between us and Motorola to further enhance the technology to provide compatibility with the widest range of industry-standard design tools and services. Subject to prior termination for cause by Motorola, our licenses under the technology transfer agreement with Motorola are perpetual. Our agreement with Motorola does not include any non-competition arrangements.

EXCHANGE CONTROLS

Under Israeli law, non-residents of Israel who purchase ordinary shares with certain non-Israeli currencies (including 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 the rate of exchange prevailing at the time of conversion.

Under Israeli law and our company's Memorandum and Articles of Association both residents and non-residents of Israel may freely hold, vote and trade ordinary shares.

TAXATION

A. ISRAELI CAPITAL GAINS TAX

Until the end of the year 2002, 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 is 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 are deemed to be business income.

As a result of the recent tax reform legislation in Israel, gains from the sale of our ordinary shares and options to purchase our ordinary shares derived from January 1, 2003 and on will in general be liable to capital gains tax of up to 15% and gains from the sale of our convertible debentures derived from January 1, 2004 and on will in general be liable to capital gains tax of 15%. This will be the case so long as our securities remain listed for trading on the Tel Aviv Stock Exchange or on a designated foreign stock market such as the NASDAQ. However, according to the tax reform legislation, non-residents of Israel will be exempt from any capital gains tax from the sale of our securities so long as the gains are not derived through a permanent establishment that the non-resident maintains in Israel, and so long as our securities remain listed for trading as described above. These provisions dealing with capital gains are not applicable to an Israeli resident whose gains from selling or otherwise disposing of our securities are deemed to be business income or whose taxable income is determined pursuant to the Israeli Income Tax Law (Inflation Adjustments), 1985; the latter law would not normally be applicable to non-resident shareholders who have no business activity in Israel.

In any event, under the US-Israel Tax Treaty, a US treaty resident cannot be liable to Israeli capital gains tax from the sale of our convertible debentures or options for the purchase of our shares, and may only be liable to Israeli capital gains tax on the sale of our ordinary shares (subject to the provisions of Israeli domestic law as described above) if that US treaty resident holds 10% or more of the voting power in our company.

B. ISRAELI TAX ON INTEREST INCOME AND ON ORIGINAL ISSUANCE DISCOUNT

Interest AND ON ORIGINAL ISSUANCE DISCOUNT (OID) on our convertible debentures, issued in January 2002, accruing from January 1, 2003 and on will in general be liable to Israeli tax of up to 15% 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 recipient is a controlling shareholder of our company, or if financing costs for the purchase of the debentures were deducted by the individual in the calculation of the individual's Israeli taxable income in which cases regular rate of tax will apply.. Interest and OID received by a corporation are generally taxable at a rate of 36%.

Under new regulations, promulgated as part of the recent tax reform, withholding at source from debenture interest and OID paid to non-resident individuals will in general be at a rate of 15% and from debenture interest and OID paid to non-resident corporations 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 convertible debentures to a US treaty resident (other than a US bank, savings institution or company) is 17.5%.

C. ISRAELI TAX ON DIVIDEND INCOME

Israeli tax at a rate of 25% is generally withheld at source from dividends paid to Israeli individuals and non-residents; in general, no withholding tax is imposed on dividends paid to Israeli companies (subject to the provision of the Israeli Income Tax Ordinance). The applicable rate for dividends paid out of the profits of an Approved Enterprise is 15%. These rates are subject to the provisions of any applicable tax treaty.

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. 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.

D. PFIC RULES

A non-U.S. corporation will be classified as a PFIC for U.S. 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 2002 or in any prior year. However, there can be no assurance that we will not be a PFIC in 2003 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, rents 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. This belief is supported by a private letter ruling issued by the IRS to a company whose circumstances are substantially the same as ours, although such private letter ruling would not be binding on the IRS in determining our status. In addition, 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 U.S. holder's holding period, such U.S. holder would be required to either: (i) pay an interest charge together with tax calculated at maximum ordinary income 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 such 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 National Market is a qualifying exchange. U.S. holders are strongly urged to consult their own tax advisers regarding the possible application and consequences of the PFIC rules.

The above 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 Israeli tax authorities, and it is not meant to replace professional advice in these matters. The above discussion is based on current Israeli tax law, which may be changed by future legislation or reforms. Non-residents should obtain professional tax advice with respect to the tax consequences under the laws of their countries of residence of holding or selling our securities.

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 a copy of our filings with the SEC, including any exhibits and schedules, at the SEC's public reference facilities in Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549 and at the regional offices of the SEC located at the Northwestern Atrium Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. You may also obtain copies of such materials from the Public Reference Section of the SEC, Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549, at prescribed rates. You may call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. In addition, such information concerning our company can be inspected and copied at the offices of the National Association of Securities Dealers, Inc., 9513 Key West Avenue, Rockville, Maryland 20850 and at the offices of the Israel Securities Authority at 22 Kanfei Nesharim St., Jerusalem, Israel. 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. You may read and copy any reports, statements or other information that we file with the SEC at the SEC facilities listed above. These SEC filings are also available to the public from commercial document retrieval services. We also generally make available on our own Web site (WWW.TOWERSEMI.COM) all 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 the 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 that may adversely impact our consolidated financial position, results of operations or cash flows.

The currency of the primary economic environment in which we conduct our operations is the U.S. dollar. Our primary market risk exposures relate to interest rate movements on borrowings, fluctuations of the dollar exchange rate vis-a-vis the NIS, and to exchange rate movements on foreign currency relating to equipment used in manufacturing processes and purchased primarily from Japan and Europe. To manage those risks and mitigate their exposure, we use financial instruments, primarily, collar agreements with or without a knock-out feature and cylinder options (call & put).

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 or issue derivative financial instruments for trading or speculative purposes.

INTEREST RATES

We have market risk exposure in changing interest rates of our long-term debt obligations. We primarily enter into debt obligations to support capital expenditures and needs. We use, from time to time, interest rate collar agreements with a knock-out feature to modify our exposure to interest rate movements and to reduce borrowing costs. These agreements limit 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. A knock-out LIBOR-based interest rate collar is a combination of a purchased knock-out cap with a cap level and a knock-out level and written floor with a floor level. According to the terms of our interest rate collar agreement, the combination is of a purchased knock-out cap with a cap level of 5.5% and a knock-out level of 7.50% and written floor with a floor level of 4.28%, in some of them floor level of or 2.8%. Under the knock-out provision in our interest rate collar agreement, in the event that the LIBOR rate exceeds 7.5% during a particular quarter, the protection provided under the interest collar agreement will expire with respect to that entire quarter. If the LIBOR rate decreases thereafter and remains below 7.50% in any successive quarter for the duration of the entire quarter, the protection provided under the interest rate collar will again be effective. The possible interest rates according to these agreements are illustrated below. The fair value of the knock-out interest rate collars as of December 31, 2002 was a \$12.0 million loss.

We are subject to cash flow exposure in connection with our \$13 million Fab 1 long-term debt, which bears interest at three month LIBOR plus 1.5%. The debt is repayable in 13 equal quarterly installments. In addition, as of December 31, 2002, we are subject to cash flow exposure in connection with our \$ 244 million long-term debt under the Fab 2 facility agreement as such debt bears interest at LIBOR plus 1.55% (2.95% as of December 31, 2002, subject to the results of our hedging activities described below). The actual debt incurred under the facility agreement is repayable in 12 equal consecutive quarterly installments commencing 3 years from the end of the quarter of each draw down. As of the date of this annual report, we have drawn down additional \$30 million under the Fab 2 facility agreement under similar terms.

For the purpose of mitigating the exposure to our long-term debt, we entered into collar agreements with a knock-out feature, for the years 2001-2007. The total amount of the collar agreements is \$ 212 million, of which \$ 172 million is effective as of December 31, 2002 (an additional \$ 40 million will be effective as of July 2004).

Under the terms of all these collar agreements and the credit facility, regarding the \$172 million effective collar agreements, if the LIBOR is below 4.28% we will pay interest at the fixed rate of 5.83%; if the LIBOR is between 4.28% and 5.56%, we will pay interest at the LIBOR plus 1.55%; if the LIBOR is between 5.56% and 7.50% we will pay interest at a fixed rate of 7.11%; and if the LIBOR is higher than 7.50%, we will pay the LIBOR rate plus 1.55%. Accordingly, the terms of our long-term debt combined with the terms of our collar agreements resulted in \$172 million long-term loans which as of December 31, 2002 bear interest at a rate of 5.83%, and additional \$85 million long-term loans which as of such date bear interest at a rate of 2.95%.

The collar agreements with a knock-out feature resulted in 2002 in a loss of \$ 3.7 million, which was mostly capitalized to property and equipment.

Under the terms of the \$40 million collar agreements, effective as of July 2004, and the credit facility, if the LIBOR is below 2.8% we will pay interest at the fixed rate of 4.35%; if the LIBOR is between 2.8% and 5.5%, we will pay interest at the LIBOR plus 1.55%; if the LIBOR is between 5.5% and 7.50% we will pay interest at a fixed rate of 7.11%; and if the LIBOR is higher than 7.50%, we will pay the LIBOR rate plus 1.55%. Assuming a 10% upward shift in the LIBOR rate at December 31, 2002, the effective fair value of the \$ 85 million debt (comprised of a total long-term debt of \$ 257 million off-set by \$ 172 million which is hedged by the collar agreements) to which we are exposed, should have been increased by \$ 0.4 million. With regard to the \$172 million debt hedged by the collar agreements, as of December 31, 2002 no market risk effect is presented since the LIBOR as of such date was 1.4% and the collar agreements' mechanism provide for a fixed rate interest of 5.83%.

Our cash equivalents and short-term interest-bearing deposits are exposed to financial 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, the carrying value approximates the fair value.

CONVERTIBLE DEBENTURES AND OPTIONS (SERIES 1). The convertible debentures, as well as the exercise price of our Options (Series 1) (exercisable into our ordinary shares) are denominated in NIS and linked to the Israel consumer price index , which is referred to as CPI. Half of the convertible debentures amount is covered by a deposit denominated in NIS and linked to the CPI. Therefore, we are exposed to the risk of NIS/dollar exchange rate fluctuations vis-a-vis the changes in the CPI only for the remaining balance of the convertible debentures. The dollar amount of our finance costs (interest and currency adjustments) related to the convertible debentures, whether expensed or capitalized, will be increased if the inflation in Israel is not offset (or is offset on a lagging basis) 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 the convertible debentures will be increased as well. On a contrary occasion, the dollar amounts we shall raise on the date of exercising our Options (Series 1) will be decreased. From the date of the convertible debentures issuance until the end of 2002 the Israel consumer price index increased by 6.79% while the US dollar/NIS exchange rate increased by 3.36%.

The convertible debentures bear annual interest at a fixed rate of 4.7%. Therefore, we are not subject to exposure to interest rate fluctuations. However, in case the actual market interest rates are lower than the interest rate provided on the convertible debentures, our actual finance costs, whether capitalized or expensed, would be higher if the interest rate on the debentures was determined based on floating rates.

Excluding the NIS deposit equivalent to half of the balance of the convertible debentures, we are not engaged in any hedging transaction to reduce our exposure risks related to our convertible debentures balance, the interest rate we are obligated to pay in relation thereto, or to the exercise prices of our Options (Series 1).

FOREIGN EXCHANGE RISK

Our main foreign currency exposures give rise to market risk associated with exchange rate movements of the US dollar, our functional and reporting currency, against the Japanese Yen, Euro and the NIS. To protect against reductions in value and the volatility of future cash flows caused by changes in foreign exchange rates, we utilize currency cylinder options (call & put) to minimize 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 to suppliers. The fair value of the cylinder options as of December 31, 2002 was \$1.6 million gain.

Accordingly, we enter, from time to time, into foreign exchange agreements to hedge exposure to equipment purchase commitments and other firm commitments. Most of those agreements are designated to eliminate exposure changes in the Japanese Yen and the Euro vis-a-vis the US dollar. During 2002, we had \$ 59 million cylinder options (call & put) complex transactions, which resulted in 2002 in a \$ 3.1 million gain (mostly capitalized to property and equipment). As of December 31, 2002 we had \$44 million open transactions.

We enter from time to time into foreign exchange agreements to hedge exposure relating to VAT, grants receivables and payroll expenses denominated in NIS. The effect of these agreements was immaterial. As of December 31, 2002, there were \$ 2.4 million open transactions in relation to VAT exposure and \$2.7 million in open transactions in relation to payroll exposure.

We are exposed to currency risk in the event of default by the other parties of the exchange transaction. The likelihood of such default is remote, as the other parties are widely recognized and reputable Israeli banks.

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

None.

ITEM 15. CONTROLS AND PROCEDURES

An evaluation was performed under the supervision and with the participation of our management, including our chief executive officers and chief financial officer, of the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-14(c) and 15d-14(c) under the Securities Exchange Act of 1934, as amended). Based on that evaluation, which was completed within 90 days of the filing date of this annual report, our chief executive officers and chief financial officer, concluded that our disclosure controls and procedures were effective though we are constantly engaged in the process of improving these controls and procedures. There have been no significant changes in our disclosure controls or in other factors that could significantly affect disclosure controls subsequent to the date of the evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

ITEM 16. [RESERVED]

PART III

ITEM 17. FINANCIAL STATEMENTS

Not applicable.

ITEM 18. FINANCIAL STATEMENTS

See Index to Financial Statements following the signature page.

ITEM 19. EXHIBITS

1.1.1 Articles of Association of the Registrant, approved by shareholders on November 14, 2000 (incorporated by reference to the correspondingly-numbered exhibit to the Registrant's Annual Report on Form 20-F for the year ended December 31, 2001 (the "2000 Form 20-F")).

1.1.2 Memorandum of Association of the Registrant (incorporated by reference to the correspondingly-numbered exhibit to the Registrant's Registration Statement on Form S-1, No. 33-83126).

2.1 Bank Warrants dated January 18, 2001 between the Registrant and Bank Hapoalim B.M. and Bank Leumi Le-Israel B.M. (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

2.2 Registration Rights Agreement, dated as of 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).

2.3 Terms of the Registrant's Convertible Debentures issued under an Indenture dated January 22, 2002 (incorporated by reference to the summary of terms included under the caption "Description of the Debentures" in Exhibit C to the Registrant's Report on Form 6-K for January 2002 (No. 2), filed January 16, 2002 ("January 2002 Form 6-K")).

2.4 Terms of the Registrant's Options (Series 1) (incorporated by reference to the summary of terms included under the caption "Description of the Options" in Exhibit C to the January 2002 Form 6-K).

3.1 Consolidated Shareholders Agreement, dated as of 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 Share Purchase Agreement, dated as of July 4, 2000, by and between SanDisk Corporation and the Registrant (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.2 Additional Purchase Obligation Agreement, dated as of July 4, 2000, by and between SanDisk Corporation ("SanDisk") and the Registrant (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.3 Share Purchase Agreement, dated as of August 29, 2000, by and between Alliance Semiconductor Corporation ("Alliance") and the Registrant (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.4 Share Purchase Agreement, dated as of December 11, 2000, by and between QuickLogic Corporation ("QuickLogic") and the Registrant (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.5 Share Purchase Agreement, dated as of December 12, 2000, by and between Macronix International Co., Ltd. ("Macronix") and the Registrant (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.6 Share Purchase Agreement, dated as of December 12, 2000, between Israel Corporation and the Registrant (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.7 Additional Purchase Obligation Agreement, dated as of December 12, 2000, between Israel Corporation and the Registrant (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.8 Share Purchase Agreement, dated February 11, 2001, between The Challenge Fund - Etgar II and the Registrant (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.9 Facility Agreement dated January 18, 2001 among the Registrant, Bank Hapoalim B.M. and Bank Leumi Le-Israel B.M. (the "Facility Agreement") (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.10 Design and Construction/Turn-Key Contract dated as of August 20, 2000 among the Registrant, M+W Zander Holding GmbH, Meissner-Baran Ltd. and Baran Group Ltd. (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.11 Option Grant to Ehud Hillman dated September 24, 2000 (Hebrew language document; a summary of the terms is included in the 2000 Form 20-F under the caption "Related Party Transactions" in "Item 7. Major Shareholders and Related Party Transactions") (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.12 Approval dated December 31, 2000 of the Israeli Investment Center (Hebrew language document; a summary of the terms is included in the 2000 Form 20-F under the caption "Fab 2 Agreements" in "Item 5. Operating and Financial Review and Prospects") (incorporated by reference to the correspondingly-numbered exhibit to the 2000 Form 20-F).

4.13 Agreement between the Registrant and Saifun dated October 9, 1997 (incorporated by reference to exhibit 1.1 to the Registrant's Annual Report on Form 20-F for the year ended December 31, 1997).

4.14 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")).

4.15 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).

- 4.16 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).
- 4.17 Wafer Partner Conversion Agreements dated September 2001 between the Registrant and each of SanDisk, Alliance and Macronix (incorporated by reference to the correspondingly-numbered exhibit to the 2001 Form 20-F).
- 4.18 Letter Agreement dated November 29, 2001 among SanDisk, Alliance, Macronix, QuickLogic and the Registrant regarding the Utilization of Prepayments (incorporated by reference to the correspondingly-numbered exhibit to the 2001 Form 20-F).
- 4.19 Letter Agreements among Alliance, Macronix, QuickLogic, ICTech and the Registrant and between SanDisk and the Registrant regarding Additional Wafer Partner Financing Date (incorporated by reference to the correspondingly-numbered exhibit to the 2001 Form 20-F).
- 4.20 Letter Agreement dated November 15, 2001 among SanDisk, Alliance, Macronix, QuickLogic, ICTech and the Registrant regarding Amendment to Financing Plan (incorporated by reference to the correspondingly-numbered exhibit to the 2001 Form 20-F).
- 4.21 First Amendment dated January 29, 2001 to the Facility Agreement (incorporated by reference to the correspondingly-numbered exhibit to the 2001 Form 20-F).
- 4.22 Second Amendment dated January 10, 2002 to Facility Agreement (incorporated by reference to the correspondingly-numbered exhibit to the 2001 Form 20-F).
- 4.23 Third Amendment dated March 7, 2002 to the Facility Agreement (incorporated by reference to the correspondingly-numbered exhibit to the 2001 Form 20-F).
- 4.24 Joint Development and Transfer and Cross License Agreement dated as of May 2002 between the Registrant and Matsushita Industrial Electronic Co., Inc. (incorporated by reference to exhibit 10.3 to the Registrant's Registration Statement on Form F-2, No. 333-97043).
- 4.25 Technology License Agreement dated as of April 7, 2000 between the Registrant and Toshiba Corporation (incorporated by reference to exhibit 10.4 to the Registrant's Registration Statement on Form F-2, No. 333-97043). *
- 4.26 Technology Transfer License Agreement, dated as of September 2002 between Registrant and Motorola, Inc. (incorporated by reference to exhibit 10.5 to the Registrant's Registration Statement on Form F-2, No. 333-97043). *
- 4.27 Fourth Amendment dated April 29, 2002 to the Facility Agreement.
- 4.28 Fifth Amendment dated September 18, 2002 to the Facility Agreement.
- 4.29 Amendment to Fifth Amendment to the Facility Agreement dated October 22, 2002 to the Facility Agreement.
- 4.30 Letter Agreement dated March 2002 among SanDisk, Alliance, Macronix, ICTech and Challenge Fund to advance Third and Fourth Milestone Payments.
- 4.31 Letter Agreement dated July, 2002 among SanDisk, Alliance, Macronix, and ICTech to exercise rights distributed in rights offering.
- 4.32 Letter Agreement dated March 2003 among SanDisk, Alliance, Macronix, ICTech, and the Registrant.

4.33 Form of Rights Agent Agreement between the Registrant and American Stock Transfer & Trust Company (including form of Rights Certificate) (incorporated by reference to exhibit 4.1 to the Registrant's Registration Statement on Form F-2, No. 333-97043).

4.34 Form of Warrant Agreement between the Registrant and American Stock Transfer & Trust Company (including form of Warrant Certificate) (incorporated by reference to exhibit 4.2 to the Registrant's Registration Statement on Form F-2, No. 333-97043).

4.35 Form of Commitment Letter from the Registrant's Shareholders, dated July 23, 2002, regarding participation in the Registrant's Rights Offering (incorporated by reference to exhibit 10.1 to the Registrant's Registration Statement on Form F-2, No. 333-97043).

4.36 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).

4.37 Development and License Agreement dated March 31, 2002 between Virage Logic Corporation and the Registrant. *

4.38 Master Services and License Agreement dated June 2002 between Artisan Components, Inc. and the Registrant. *

12.1 Certification by Co-Chief Executive Officers pursuant to section 906 of the Sarbanes-Oxley Act of 2002.

12.2 Certification by Chief Financial Officer pursuant to section 906 of the Sarbanes-Oxley Act of 2002.

* Portions of this exhibit have been omitted pursuant to a request for confidential treatment.

SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant certifies that it meets all the requirements for filing on Form 20-F and has duly caused this Annual Report to be signed on its behalf by the undersigned, thereunto duly authorized on this 14 day of April, 2003.

TOWER SEMICONDUCTOR LTD.

By: Rafael M. Levin

/s/ Rafael M. Levin
Co-Chief Executive Officer

CERTIFICATIONS

I, Rafael Levin, certify that:

1. I have reviewed this annual report on Form 20-F of Tower Semiconductor Ltd.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

- a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
- b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
- c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

- a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
- b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

April 14, 2003

/S/ RAFAEL LEVIN

RAFAEL LEVIN
CO-CHIEF EXECUTIVE OFFICER

CERTIFICATIONS

I, Yoav Nissan-Cohen, certify that:

1. I have reviewed this annual report on Form 20-F of Tower Semiconductor Ltd.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

- a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
- b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
- c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

- a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
- b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

April 14, 2003

/s/ YOAV NISSAN-COHEN

YOAV NISSAN-COHEN
CO-CHIEF EXECUTIVE OFFICER

CERTIFICATIONS

I, Amir Harel, certify that:

1. I have reviewed this annual report on Form 20-F of Tower Semiconductor Ltd.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

- a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
- b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
- c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

- a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
- b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

April 14, 2003

/S/ AMIR HAREL

AMIR HAREL
CHIEF FINANCIAL OFFICER

TOWER SEMICONDUCTOR LTD.
AND SUBSIDIARY
CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2002

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
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INDEPENDENT AUDITORS' REPORT
TO THE SHAREHOLDERS OF
TOWER SEMICONDUCTOR LTD.

We have audited the accompanying consolidated balance sheets of Tower Semiconductor Ltd. (the "Company") and subsidiary as of December 31, 2002 and 2001, and the related consolidated statements of operations, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2002. 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 auditing standards generally accepted in the United States of America. 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 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 the Board of Directors and 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, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company and subsidiary as of December 31, 2002 and 2001, and the consolidated results of their operations, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2002, in accordance with accounting principles generally accepted in Israel.

Accounting principles generally accepted in Israel vary in certain significant respects from accounting principles generally accepted in the United States of America. The application of the latter would have affected the determination of the financial position and results of operations as of the dates and for the years presented to the extent summarized in Note 20.

Brightman Almagor & Co.
Certified Public Accountants
A member of Deloitte Touche Tohmatsu

Tel Aviv, Israel
February 24, 2003

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
CONSOLIDATED BALANCE SHEETS
(dollars in thousands, except share data and per share data)

		As of December 31,	
		-----	-----
	Note	2002	2001
	-----	-----	-----
A S S E T S			
CURRENT ASSETS			
Cash and cash equivalents		\$ 7,857	\$ 19,610
Short-term interest-bearing deposits		10,500	10,044
Cash and short-term interest-bearing deposits designated for investments relating to Fab 2		51,338	3,548
Trade accounts receivable (net of allowance for doubtful accounts of \$155 and \$215, respectively)	15	7,456	3,321
Other receivables	3	21,322	21,250
Inventories	4	10,201	8,428
Other current assets		1,407	1,219
		-----	-----
Total current assets		110,081	67,420
		-----	-----
LONG-TERM INVESTMENTS			
Long-term interest-bearing deposits designated for investments relating to Fab 2		11,893	--
Other long-term investment	5	6,000	6,000
		-----	-----
		17,893	6,000
		-----	-----
PROPERTY AND EQUIPMENT, NET	6	493,074	340,724
		-----	-----
OTHER ASSETS	7	95,213	57,910
		=====	=====
 TOTAL ASSETS		 \$ 716,261	 \$ 472,054
		=====	=====
 LIABILITIES AND SHAREHOLDERS' EQUITY			
CURRENT LIABILITIES			
Short-term debt	8	\$ 4,000	\$ 14,000
Trade accounts payable		76,083	64,484
Other current liabilities	9	8,071	5,271
		-----	-----
Total current liabilities		88,154	83,755
LONG-TERM DEBT	10	253,000	115,000
CONVERTIBLE DEBENTURES	11	24,121	--
OTHER LONG-TERM LIABILITIES	12	5,406	2,584
LONG-TERM LIABILITY IN RESPECT OF CUSTOMERS' ADVANCES	13A	47,246	17,910
		-----	-----
Total liabilities		417,927	219,249
		-----	-----
SHAREHOLDERS' EQUITY			
Ordinary shares, NIS 1 par value - authorized 70,000,000 shares; issued 44,735,532 and 26,297,102 shares, respectively	14	11,294	7,448
Additional paid-in capital		400,808	307,865
Shareholder receivables and unearned compensation		(53)	(195)
Accumulated deficit		(104,643)	(53,241)
		-----	-----
Treasury stock, at cost - 1,300,000 shares	14	307,406	261,877
		(9,072)	(9,072)
		-----	-----
Total shareholders' equity		298,334	252,805
		=====	=====
 TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		 \$ 716,261	 \$ 472,054
		=====	=====

See notes to consolidated financial statements.

Rafi Levin, Co-CEO

Idan Ofer, Chairman of the
Board of Directors

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

	Note	Year ended December 31,		
		2002	2001	2000
SALES	13D, 15	\$ 51,801	\$ 52,372	\$ 104,775
COST OF SALES	13A	67,022	76,733	88,787
GROSS PROFIT (LOSS)		(15,221)	(24,361)	15,988
OPERATING COSTS AND EXPENSES				
Research and development		17,031	9,556	8,965
Marketing, general and administrative	13A	17,091	14,489	11,428
		34,122	24,045	20,393
OPERATING LOSS		(49,343)	(48,406)	(4,405)
FINANCING INCOME (EXPENSE), NET	16	(2,104)	1,465	1,394
OTHER INCOME (EXPENSE), NET	5B, 5D	45	8,419	(478)
LOSS BEFORE INCOME TAX EXPENSE		(51,402)	(38,522)	(3,489)
INCOME TAX EXPENSE	17	--	--	(500)
LOSS FOR THE YEAR		\$ (51,402)	\$ (38,522)	\$ (3,989)
BASIC LOSS PER ORDINARY SHARE				
Loss per share		\$ (1.63)	\$ (1.92)	\$ (0.26)
Loss used to compute basic loss per share		\$ (51,402)	\$ (38,459)	\$ (3,544)
Weighted average number of ordinary shares outstanding - in thousands		31,523	20,020	13,676

See notes to consolidated financial statements.

TOWER SEMICONDUCTOR LTD.
STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
(dollars in thousands, except share data and per share data)

	Ordinary shares		Additional paid-in capital	Proceeds on account of a warrant	Shareholder receivables and unearned compensatio	Accumulated deficit	Treasury stock	Total
	Shares	Amount						
BALANCE - JANUARY 1, 2000	13,263,593	\$4,329	\$138,539	\$ --	\$(945)	\$(10,730)	\$(9,072)	\$122,121
Exercise of share options	299,013	75	2,566					2,641
Unearned compensation - employees			1,857		(1,857)			--
Unearned compensation - consultants			1,576					1,576
Amortization of unearned compensation					1,691			1,691
Repayment of shareholder receivables					618			618
Proceeds on account of a warrant			--	9,990				9,990
Loss for the year						(3,989)		(3,989)
BALANCE - DECEMBER 31, 2000	13,562,606	\$4,404	\$144,538	\$9,990	\$(493)	\$(14,719)	\$(9,072)	\$134,648
Issuance of shares, net of related costs	11,930,675	2,850	147,798					150,648
Exercise of a warrant	772,667	187	9,813	(9,990)				10
Exercise of share options	31,154	7	265					272
Cancellation of unearned compensation in respect of non-vested options, net			(15)		15			--
Stock-based compensation related to the Facility Agreement with the Banks, Note 14B(5)			5,466					5,466
Amortization of unearned compensation					283			283
Loss for the year						(38,522)		(38,522)
BALANCE - DECEMBER 31, 2001	26,297,102	\$7,448	\$307,865	\$ --	\$(195)	\$(53,241)	\$(9,072)	\$252,805
Issuance of shares, net of related costs	18,438,430	3,846	92,943					96,789
Amortization of unearned compensation					142			142
Loss for the year						(51,402)		(51,402)
BALANCE - DECEMBER 31, 2002	44,735,532	\$11,294	\$400,808	\$ --	\$(53)	\$(104,643)	\$(9,072)	\$298,334

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
CONSOLIDATED STATEMENTS OF CASH FLOWS
(dollars in thousands, except share data and per share data)

	Year ended December 31,		
	2002	2001	2000
CASH FLOWS - OPERATING ACTIVITIES			
Loss for the year	\$ (51,402)	\$ (38,522)	\$ (3,989)
Adjustments to reconcile loss for the year to net cash provided by operating activities:			
Income and expense items not involving cash flows:			
Depreciation and amortization	18,821	21,721	25,917
Other expense (income), net	(45)	(8,419)	478
Earnings on marketable debt securities	--	--	(67)
Changes in assets and liabilities:			
Decrease (increase) in trade accounts receivable	(4,135)	8,602	(3,821)
Decrease (increase) in other receivables and other current assets	(1,305)	649	(894)
Decrease (increase) in inventories	(609)	8,402	(2,113)
Increase (decrease) in trade accounts payable	4,686	(5,190)	(710)
Increase (decrease) in other current liabilities	2,764	(999)	723
Increase in other long-term liabilities	2,822	105	1,421
	(28,403)	(13,651)	16,945
Increase (decrease) in long-term liability in respect of customers' advances	29,336	17,910	(760)
Net cash provided by operating activities	933	4,259	16,185
CASH FLOWS - INVESTING ACTIVITIES			
Increase in cash, short-term and long-term interest-bearing deposits designated for investments relating to Fab 2	(59,683)	(3,548)	--
Investments in property and equipment	(205,099)	(295,203)	(53,530)
Investment grants received	40,481	56,454	14,599
Proceeds from sale of equipment	70	229	168
Investments in other assets	(34,290)	(32,098)	(16,121)
Decrease (Increase) in deposits, net	(456)	(1,599)	22,930
Proceeds from realization of marketable debt securities	--	--	5,127
Proceeds from sale of (investments in) long-term investments	--	11,050	(2,850)
Net cash used in investing activities	(258,977)	(264,715)	(29,677)
CASH FLOWS - FINANCING ACTIVITIES			
Proceeds from issuance of shares, net	96,751	152,586	--
Proceeds from exercise of share options	--	272	2,641
Proceeds on account of warrant and exercise of a warrant	--	10	9,990
Increase (decrease) in short-term debt	(10,000)	10,000	--
Repayment of long-term debt	(4,000)	(15,064)	--
Proceeds from long-term debt	142,000	122,000	--
Repayment of shareholder receivables	--	--	618
Proceeds from sale of securities, net	21,540	--	--
Net cash provided by financing activities	246,291	269,804	13,249
	=====	=====	=====
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(11,753)	9,348	(243)
CASH AND CASH EQUIVALENTS - BEGINNING OF YEAR	19,610	10,262	10,505
CASH AND CASH EQUIVALENTS - END OF YEAR	\$ 7,857	\$ 19,610	\$ 10,262
	=====	=====	=====
NON-CASH ACTIVITIES			
Investments in property and equipment	\$ 49,419	\$ 41,610	\$ 11,097
	=====	=====	=====
Exercise of a warrant		\$ 9,990	
		=====	
the Facility Agreement with the Banks		\$ 5,466	
		=====	
Investments in other assets	\$ 4,304	\$ 4,357	\$ 1,117
	=====	=====	=====
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION			
Cash paid during the year for interest	\$ 11,594	\$ 3,143	\$ 866
	=====	=====	=====

Cash paid during the year for income taxes

\$	151	\$	1,819	\$	1,090
	=====		=====		=====

See notes to consolidated financial statements.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except share data and per share data)

NOTE 1 - DESCRIPTION OF BUSINESS AND GENERAL

A. DESCRIPTION OF BUSINESS

Tower Semiconductor Ltd. (the "Company"), incorporated in Israel, commenced operations in March 1993. The Company is an independent "wafer" manufacturer of semiconductor integrated circuits on silicon wafers in geometries from 1.0 to 0.35 micron on 150 millimeters wafers. As a foundry, the Company manufactures wafers using its advanced technological capabilities and the proprietary integrated circuit designs of its customers. In addition, the Company also offers certain integrated circuit design services.

The industry in which the Company operates is characterized by wide fluctuations in supply and demand. Such industry is also characterized by the complexity and sensitivity of the manufacturing process, by high levels of fixed costs, and by the need for constant improvements in production technology.

The Company's Ordinary Shares are traded on the NASDAQ National Market since October 1994; since January 2001 they are also traded on the Tel Aviv Stock Exchange.

B. ESTABLISHMENT OF NEW FABRICATION FACILITY

In January 2001, the Company's Board of Directors approved the establishment of a new wafer fabrication facility in Israel ("Fab 2"), at an expected cost of approximately \$1,500,000. Fab 2 is designated to manufacture semiconductor integrated circuits on silicon wafers in geometries of 0.18 micron and below on 200 millimeters wafers. The Company entered into several related agreements and arrangements in connection with Fab 2, including agreements and other arrangements with technology and Wafer Partners, equity investors, the Company's Banks, the government of Israel and others to provide an aggregate of \$1,146,000 of financing Fab 2. The Fab 2 project is a complex undertaking, which entails substantial risks and uncertainties. For further details concerning such agreements, risks and uncertainties, see Note 13A.

C. USE OF ESTIMATES IN PREPARATION OF FINANCIAL STATEMENTS

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company's consolidated financial statements are presented in accordance with generally accepted accounting principles ("GAAP") in Israel. See Note 20 for the material differences between GAAP in Israel and in the United States of America.

A. PRINCIPLES OF CONSOLIDATION

The Company's financial statements include the financial statements of the Company and its wholly owned marketing subsidiary in the United States of America, after elimination of material inter-company transactions and balances.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except share data and per share data)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

B. CASH AND CASH EQUIVALENTS

Cash and cash equivalents consist of deposits in banks and short-term investments (primarily time deposits and certificates of deposit) with original maturities of three months or less.

C. ALLOWANCE FOR DOUBTFUL ACCOUNTS

The allowance for doubtful accounts is computed on the specific identification basis for accounts whose collectibility, in management's estimation, is uncertain.

D. INVENTORIES

Inventories are stated at the lower of cost or market. Cost is determined for raw materials, spare parts and supplies on the basis of moving average cost per unit. Cost is determined for work in process and finished goods on the basis of actual production cost.

E. LONG-TERM INVESTMENTS

Long-term investments in other entities, over whose operating and financial policies the Company does not have the ability to exercise significant influence, are presented at cost.

F. PROPERTY AND EQUIPMENT

(1) Property and equipment are presented at cost, including interest and other capitalizable costs. Capitalizable costs include only incremental direct costs that are identifiable with and related to the property and equipment and are incurred prior to its initial operation. Directly identifiable costs include incremental direct costs associated with acquiring, constructing, establishing and installing property and equipment (including as such performed by the Company); and costs directly related to preproduction test runs of property and equipment that are necessary to get it ready for its intended use. Those costs include payroll and payroll-related costs of employees who devote time and dedicated solely to the acquiring, constructing, establishing and installing property and equipment. Allocation of capitalizable direct costs is based on management's estimates and methodologies including time sheet inputs.

Cost is presented net of investment grants received or receivable, and less accumulated depreciation and amortization. The accrual for grants receivable is determined based on qualified investments made during the reporting period, provided that the primarily criteria for entitlement have been met. Depreciation is calculated based on the straight-line method over the estimated economic lives of the assets or terms of the related leases, as follows:

Prepaid perpetual land lease and buildings	14-25 years
Machinery and equipment	5 years
Transportation vehicles	7 years

(2) Management reviews long-lived assets on a periodic basis, as well as when such a review is required based upon relevant circumstances, to determine, based on estimated future cash flows, whether events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. If an asset is considered to be impaired, an impairment charge is recognized for the amount by which the carrying amount of the asset exceeds its fair value based on discounted expected cash flows.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except share data and per share data)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

G. OTHER ASSETS

The cost of Fab 2 technologies includes internal costs, mainly payroll-related costs of employees designated for integrating the technologies in the Company's facilities, and direct costs associated with implementing the technologies until the technologies are ready for their intended use. The costs in relation to Fab 2 technologies shall be amortized over the expected estimated economic life of the technologies. Amortization shall phase in commencing on the dates on which each of the Fab 2 manufacturing lines is ready for use, and will be based on the straight-line method over a four-year period.

Prepaid finance expenses included in other assets in relation to funding the establishment of Fab 2, are amortized over the lives of the borrowings based on the repayment schedule of such funding (in general, 6 years). During the establishment period of Fab 2, amortized finance expenses are capitalized to property and equipment. Commencing on the date on which Fab 2 is ready for its intended use, or the date on which any other property and equipment is ready for its intended use (given this date in relation to such property and equipment is subsequent to the operation date of Fab 2), the deferred finance expenses are amortized to the statement of operations.

Impairment examinations and recognition are performed and determined based on the accounting policy outlined in F(2) above.

H. CONVERTIBLE DEBENTURES

Convertible debentures, the conversion of which is not anticipated as of the balance-sheet date, are presented as long-term liabilities based on their terms as of such date.

I. INCOME TAXES

The Company records deferred income taxes to reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and for tax purposes. Deferred taxes are computed based on the tax rates anticipated to be in effect (under applicable law at the time the financial statements are prepared) when the deferred taxes are expected to be paid or realized.

Deferred tax liabilities and assets are classified as current or noncurrent based on the classification of the related asset or liability for financial reporting, or according to the expected reversal dates of the specific temporary differences, if not related to an asset or liability for financial reporting. Deferred tax liabilities are recognized for temporary differences that will result in taxable amounts in future years. Deferred tax assets are recognized for temporary differences which will result in deductible amounts in future years and for carryforwards. A valuation allowance against such deferred tax asset is recognized if it is more likely than not that some portion or all of the deferred tax asset will not be realized.

J. REVENUE RECOGNITION

Revenues are recognized upon shipment or as services are rendered when title has been transferred, collectibility is reasonably assured and acceptance provisions criteria are satisfied, based on performing electronic, functional and quality tests on the products prior to shipment and customer on-site testing. Such testing reliably demonstrates that the products meet all of the specified criteria prior to formal customer acceptance, and that product performance upon customer on-site testing can reasonably be expected to conform to the specified acceptance provisions. An accrual for estimated returns, computed primarily on the basis of historical experience, is recorded at the time when revenues are recognized.

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NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

K. RESEARCH AND DEVELOPMENT

Research and development costs are charged to operations as incurred. Amounts received or receivable from the government of Israel and others, as participation in research and development programs, are offset against research and development costs. The accrual for grants receivable is determined based on the terms of the programs, provided that the criteria for entitlement have been met.

L. LOSS PER ORDINARY SHARE

Basic loss per ordinary share is calculated based on the weighted average number of ordinary shares outstanding for each period presented, including retroactive effect for the beginning of each period of shares issued upon exercise of share options and upon conversion into shares of convertible debentures during such period, and give effect to shares issuable from options whose exercise is probable and to shares issuable from convertible debentures whose conversion is probable based on specific calculations. The difference between loss for the year and loss used to compute loss per share is due to the inclusion of imputed interest income on the exercise price of options exercised during the year and of in-the-money options, as required under Israeli GAAP. See Note 20I for disclosure of loss per share data in accordance with U.S. GAAP.

M. DERIVATIVE FINANCIAL INSTRUMENTS

The Company, from time to time, enters into foreign exchange agreements (primarily forward contracts and options) as a hedge against non-dollar equipment purchase and other firm commitments. Gains and losses on such agreements through the date that the equipment is received or the commitment is realized are deferred and capitalized to the cost of equipment, while gains and losses subsequent thereto, through the date of actual payment of the liability, are included in financing income (expense), net.

In addition, the Company, from time to time, enters into agreements to hedge interest rate exposure on long-term loans. Gains and losses on such agreements are recognized on a current basis in accordance with the terms of these agreements, and expensed or capitalized as appropriate based on the circumstances.

See Note 20C for disclosure of the derivative financial instruments in accordance with U.S. GAAP.

N. FUNCTIONAL CURRENCY AND TRANSACTION GAINS AND LOSSES

The currency of the primary economic environment in which the Company conducts its operations is the U.S. dollar ("dollar"). Accordingly, the Company uses the dollar as its functional and reporting currency. Financing expenses, net in 2002 reflected net foreign currency transaction loss of \$1,509 (in 2001 a loss of \$263 and in 2000 a gain of \$31).

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
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NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

O. STOCK-BASED COMPENSATION

The Company accounts for employee stock-based compensation in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25") and authoritative interpretations thereof. Accordingly, the Company accounts for share options granted to employees and directors based on the intrinsic value of the options on the measurement date. The compensation cost of options without a fixed measurement date is remeasured at each balance sheet date. Deferred compensation in respect of awards with graded vesting terms is amortized to compensation expense over the relevant vesting periods. In a manner consistent with FIN 28, the vesting period over which compensation is expensed is determined, based on the straight-line method, separately for each portion of the award as if the grant were a series of awards. See Note 14B(6) for pro forma disclosures required by SFAS 123 and SFAS 148.

The Company accounts for stock-based compensation of non-employees using the fair value method in accordance with Financial Accounting Standards Board Statement No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123") and EITF 96-18: Accounting for Equity Instruments That are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services. The award cost of options granted in connection with bank financing is amortized as financing expense over the terms of the loans, in a manner described in paragraph G above. The award cost of options granted to consultants in relation to equity transactions is offset against paid-in-capital from the investments.

P. RECENT ACCOUNTING PRONOUNCEMENTS BY THE FASB

- (1) RESCISSION AND AMENDMENTS OF CERTAIN SFAS - In April 2002, the FASB issued Statement of Financial Accounting Standards No. 145 "Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13 and Technical Corrections" ("SFAS 145"). SFAS 145 rescinds, amends and clarifies certain previous standards related primarily to debt extinguishments and leases. SFAS 145 eliminates the requirement that gains and losses from the extinguishments of debt be aggregated and classified as an extraordinary item. The rescission of SFAS No. 4 is effective for fiscal years beginning after May 15, 2002. The remainder of SFAS 145 is generally effective for transactions occurring after May 15, 2002. Adoption of SFAS 145 does not have and is not expected to have any material impact on the Company's financial position and results of operations.
- (2) ACCOUNTING FOR COSTS ASSOCIATED WITH EXIT OR DISPOSAL ACTIVITIES - In July 2002, the FASB issued Statement of Financial Accounting Standards No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" ("SFAS 146"). SFAS 146 supersedes EITF No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)". SFAS 146 requires companies to recognize costs associated with exit or disposal activities when they are incurred rather than at the date of a commitment to an exit or disposal plan, as required by EITF 94-3. SFAS 146 is effective for exit or disposal activities that are initiated after December 31, 2002, with early application encouraged. Adoption of SFAS 146 is not expected to have any impact on the Company's financial position and results of operations.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
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(dollars in thousands, except share data and per share data)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

P. RECENT ACCOUNTING PRONOUNCEMENTS BY THE FASB (cont.)

- (3) ACCOUNTING FOR STOCK-BASED COMPENSATION -- TRANSITION AND DISCLOSURE -- AN AMENDMENT OF FASB STATEMENT NO. 123 - In December 2002, the FASB issued Statement of Financial Accounting Standards Board No. 148, "Accounting for Stock-Based Compensation -- Transition and Disclosure -- an amendment of FASB Statement No. 123" ("SFAS 148"). SFAS 148 amends SFAS No. 123 to provide alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, SFAS 148 amends the disclosure requirements of SFAS 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. The Company has followed the prescribed format and has provided the additional disclosures required by SFAS 148 in these financial statements for the periods presented (see Note 14B(6)), and will also provide the disclosures in its quarterly reports containing condensed financial statements for interim periods beginning with the quarterly period ending March 31, 2003.
- (4) FIN 45 - In November 2002, the FASB issued FASB Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others" ("FIN 45"). This interpretation requires elaborating on the disclosures that must be made by a guarantor in its interim and annual financial statements about its obligations under certain guarantees that it has issued. It also clarifies that a guarantor is required to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. The disclosure requirements of FIN 45 are effective for financial statements issued after December 15, 2002 and its recognition requirements are applicable for guarantees issued or modified after December 31, 2002. While the Company is currently evaluating the impact of the adoption of FIN 45 have on its financial position and results of operations, it does not expect such impact to be material.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

P. RECENT ACCOUNTING PRONOUNCEMENTS BY THE FASB (cont.)

- (5) FIN 46 - In January, 2003, the FASB issued FASB Interpretation No. 46, "Consolidation of Variable Interest Entities" ("FIN 46") This Interpretation of Accounting Research Bulletin No. 51, "Consolidated Financial Statements", addresses consolidation by enterprises of variable interest entities in which equity investors do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional support from other parties. FIN 46 applies immediately to variable interest entities created after January 31, 2003, and to variable interest entities in which an enterprise obtains an interest after that date. With respect to variable interest entities, if any, in which the Company holds a variable interest acquired before February 1, 2003, the guidance in FIN 46 will be in effect for the Company's financial statements beginning July 1, 2003. While the Company is currently evaluating the impact of the adoption of FIN 46 on its financial position and results of operations, it does not expect such impact to be material.

Q. RECENT ACCOUNTING PRONOUNCEMENTS BY THE ISRAELI ACCOUNTING STANDARDS BOARD

In January 2003, the Israeli Accounting Standards Board issued Standard No.15, "Impairment of Assets". This Standard is the initial formal accounting pronouncement in Israel addressing the accounting treatment and presentation of impairment of assets, which establishes procedures to be implemented in order to ensure that assets are not presented in amounts exceeding their recoverable value. An asset's recoverable value is the higher of the asset's net selling price and the asset's value in use, the latter being equal to the asset's discounted expected cash flows. Prior to issuing Standard No. 15, the Company tested the recoverability of its assets based on undiscounted expected cash flows, a method that under Standard No. 15 will no longer be acceptable. Initial application of the Standard will generally be on a prospective basis. Standard No.15 is effective for financial statements for reporting periods commencing January 1, 2003 or thereafter, with early application encouraged. The adoption of the provisions of Standard No. 15 as of December 31, 2002, would not have a material effect on the Company's financial position and results of operations as of such date.

R. RECLASSIFICATION

Certain amounts in prior years' financial statements have been reclassified in order to conform to the 2002 presentation.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
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NOTE 3 - OTHER RECEIVABLES

Other receivables consist of the following:

	As of December 31,	
	2002	2001
Government of Israel - investment grants receivable	\$ 14,200	\$ 18,083
Other government agencies	5,025	3,167
Others	2,097	--
	\$ 21,322	\$ 21,250
	=====	=====

NOTE 4 - INVENTORIES

Inventories consist of the following (*):

	As of December 31,	
	2002	2001
Raw materials	\$3,815	\$ 2,739
Spare parts and supplies	3,509	3,216
Work in process	2,860	1,673
Finished goods	17	800
	\$ 10,201	\$ 8,428
	=====	=====

(*) Net of write-downs to net realizable value of \$307 and \$412 as of December 31, 2002 and 2001, respectively.

NOTE 5 - OTHER LONG-TERM INVESTMENTS

- A. SAIFUN - The investment in Saifun Semiconductor Ltd. ("Saifun"), an Israeli company which designs and develops memory designs, is based on an agreement between the Company and Saifun signed in October 1997. The Company's investments in Saifun as of December 31, 2002 and 2001 amounted to \$6,000, representing 11.8% and 12.3% of Saifun's share capital, respectively, (on a fully-diluted basis - 10.5% and 11.1%, respectively).

- B. AZALEA - In September 2000, the Board of Directors of the Company approved the investment of \$1,100 in Azalea Microelectronics Corporation ("Azalea"), a California corporation that, inter-alia, develops and designs microelectronics modules. This investment represents 15% of Azalea's share capital as of December 31, 2002. In addition, the Company and Azalea signed a development agreement for the development by Azalea of certain modules based on the Company's technologies. Due to management's estimate, based on certain circumstances indicating that the carrying amount of the Company's investment in Azalea may not be recoverable, the Company impaired, during the third quarter of 2001, its entire investment in Azalea.

- C. Under certain provisions in force through September 30, 2003, stipulated in the Facility Agreement entered into by the Company in connection with Fab 2 (see Note 13A(4)), the Company might be obliged to dispose some or all its long-term investments. For liens, see Note 13A(4).

- D. VIRAGE LOGIC CORP. - During the year ended December 31, 2001 the Company sold all of its shareholdings in Virage Logic Corp. for an aggregate of \$11,050 and for a gain of \$9,550. Virage Logic Corp. is a Delaware corporation, which provides semiconductor companies with memory designs for systems contained on silicon chip.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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NOTE 6 - PROPERTY AND EQUIPMENT, NET

A. COMPOSITION

	As of December 31,	
COST:	2002	2001
	----	----
Prepaid perpetual land lease and buildings	\$215,240	\$ 163,148
Machinery and equipment	440,048	320,632
Transportation vehicles	4,198	4,551
	-----	-----
	659,486	488,331
	-----	-----
 ACCUMULATED DEPRECIATION AND AMORTIZATION:		
Prepaid perpetual land lease and buildings	13,215	11,561
Machinery and equipment	151,191	134,369
Transportation vehicles	2,006	1,677
	-----	-----
	166,412	147,607
	=====	=====
	\$ 493,074	\$340,724
	=====	=====

Supplemental disclosure relating to cost of property and equipment:

- (1) As of December 31, 2002 and 2001, the cost of property and equipment included costs relating to Fab 2 (see Note 1B) in the amount of \$434,421 and \$262,644, respectively. Said amounts are net of investment grants of \$99,365 and \$60,754 respectively. Depreciation of Fab 2 shall commence on the date in which Fab 2 is ready for its intended use.
- (2) As of December 31, 2002, the cost of buildings, machinery and equipment was reflected net of investment grants of \$205,390 (as of December 31, 2001 - \$167,969).
- (3) Cost of property and equipment as of December 31, 2002 includes capitalized interest of \$11,588 (as of December 31, 2001 - \$1,328).

B. INVESTMENT GRANTS

In connection with the formation of the Company, the Investment Center of the Ministry of Industry and Trade of the State of Israel ("Investment Center"), under its "approved enterprise" program, approved an investment program for expenditures on buildings and equipment in the aggregate amount (as amended) of approximately \$96,850. The Company completed its investments under this program, and received final approval from the Investment Center in November 1997.

In January 1996, an investment program ("1996 program") for expansion of the Company's plant in the aggregate amount (as amended in December 1999 and 2001) of \$228,680 was approved by the Investment Center. The approval certificate provides for a benefit track entitling the Company to investment grants at a rate of 34% of the investments included in such certificate made through December 31, 2001. The Company completed its investments under the 1996 program in December 2001 and invested through such date approximately \$207,000. In May 2002, the Company submitted the final report in relation to the 1996 program.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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NOTE 6 - PROPERTY AND EQUIPMENT, NET (cont.)

B. INVESTMENT GRANTS (cont.)

See Note 13A(6) with respect to the Fab 2 approved program, approved by the Investment Center in December 2000.

Entitlement to the above grants is subject to various conditions. In the event the Company fails to comply with such conditions, the Company 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 assets of the Company.

C. For liens see Note 13A(4).

NOTE 7 - OTHER ASSETS

	As of December 31,	
	2002	2001
Other assets consist of the following:		
In relation to Fab 2:		
Technologies - Note 13A(1)	\$ 78,572	\$ 43,664
Deferred financing charges	13,560	13,125
Other	3,052	629
Other	29	492
	\$ 95,213	\$ 57,910
	\$ 95,213	\$ 57,910

NOTE 8 - SHORT-TERM DEBT

	As of December 31,	
	2002	2001
Short-term debt consist of the following:		
Short-term debt from banks (*)	\$ --	\$ 10,000
Current maturities of long-term debt (Note 10A)	4,000	4,000
	\$4,000	\$ 14,000
	\$4,000	\$ 14,000

(*) The short-term debt as of December 31, 2001, designated for funding the Company's activities not related to Fab 2, was fully repaid in May 2002.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
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NOTE 9 - OTHER CURRENT LIABILITIES

	As of December 31,	
	2002	2001
Other current liabilities consist of the following:		
Accrued salaries	\$2,858	\$2,741
Vacation accrual	2,910	2,199
Interest payable on convertible debentures	1,101	--
Due to related parties	6	128
Other	1,196	203
	\$8,071	\$5,271
	=====	=====

NOTE 10 - LONG-TERM DEBT

A. COMPOSITION:

	Annual interest as of December 31, 2002	As of December 31,	
		2002	2001
In U.S. Dollar	5.83%	\$ 172,000	\$ 119,000
In U.S. Dollar	2.95%	85,000	--
		257,000	119,000
Less - current maturities		4,000	4,000
		\$ 253,000	\$ 115,000
		=====	=====

B. Loans received bear interest based on the three-month USD Libor rate plus 1.50% to 1.55%. The annual interest rate of loans, the amount of which as of December 31, 2002 was \$172,000, reflects the terms of collar agreements with a knock-out feature described in Note 18A. Interest is payable at the end of each quarter.

C. See Note 13A(4) for additional information regarding the Facility Agreement between the Company and the Banks for financing the construction of Fab 2. Of the total amount of the long-term debt as of December 31, 2002, \$13,000 are designated for the Company's activities not related to Fab 2 (\$17,000 as of December 31, 2001).

D. REPAYMENT SCHEDULE

The balance of the long-term debt as of December 31, 2002, is repayable as follows:

2003 - current maturities	\$ 4,000 -----
2004	9,167
2005	61,667
2006	82,333
2007 and thereafter	99,833
	253,000
	=====
	\$ 257,000
	=====

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
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NOTE 10 - LONG-TERM DEBT (cont.)

- E. The agreements with the Company's Banks restrict the Company's ability to place liens on its assets (other than to the State of Israel in respect of investment grants) without the prior consent of the Banks. Furthermore, the agreements contain certain restrictive financial covenants (see also Note 13A(4)). As of December 31, 2002, in management's opinion the Company was in full compliance with such covenants, except as indicated in Note 13A(4).

NOTE 11 - CONVERTIBLE DEBENTURES

On January 22, 2002, the Company issued, based on a prospectus published on January 15, 2002 in Israel, NIS principal amount of 110,579,800 convertible debentures. The debentures were issued at 96% of their par value. The debentures are linked to the Israeli Consumer Price Index ("CPI") and bear annual interest at the rate of 4.7%, payable on January 20 of each year commencing on January 20, 2003. The principal on the debentures is payable in four installments on January 20 of each year between 2006 and 2009. The debentures may be converted until December 31, 2008 into Ordinary Shares, at a conversion rate of one Ordinary Share per each NIS 41 amount of the debentures (subject to customary adjustments). The effective rate of interest on the convertible debentures, taking into account the initial proceeds, net of the discount and the related costs of issuance, is 7.26%. For U.S. GAAP purposes, which require taking into account, in addition to the discount and the related issuance costs, amounts attributed to the options described in Note 14E, the effective rate of interest on the convertible debentures is 9.88%.

Subject to certain conditions, the Company may, commencing in July 2005, announce the early redemption of the debentures or part thereof, provided that the sum of the last payment on account of the principal shall be no less than approximately \$700.

If on a payment date of the principal or interest on the debentures there exists an infringement of certain covenants and conditions under the Facility Agreement, the dates for payment of interest and principal on the debentures may be postponed, depending on various scenarios under the Facility Agreement until such covenant or condition is settled.

Pursuant to a covenant in the Facility Agreement, the Company deposited 50% of the principal amount (net of discounts) of the unconverted debentures (\$11,893 as of December 31, 2002) in favor of the Banks as security for payment of the amounts the Company owes the Banks. The said amount may be released only as provided in the Facility Agreement, including for payment of interest on the convertible debentures.

The debentures are unsecured and rank behind the Company's existing and future secured indebtedness to the Banks under the Facility Agreement, as well as to the government of Israel in connection with grants the Company receives under the Fab 2 approved enterprise program.

See Note 20E for disclosure of the accounting treatment of the convertible debentures under U.S. GAAP.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
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 (dollars in thousands, except share data and per share data)

NOTE 12 - OTHER LONG-TERM LIABILITIES

A. COMPOSITION	As of December 31,	
	2002	2001
	-----	-----
Net liability for employee termination benefits (see B below):		
Gross obligation	\$ 16,274	\$ 12,918
Amounts funded through deposits to severance pay funds and purchase of insurance policies	(12,368)	(10,334)
	-----	-----
	3,906	2,584
Other	1,500	--
	-----	-----
	\$ 5,406	\$ 2,584
	=====	=====

B. EMPLOYEE TERMINATION BENEFITS

Israeli law and labor agreements determine the obligations of the Company to make severance payments to dismissed employees and to employees leaving employment under certain other circumstances. The liability for severance pay benefits, as determined by Israeli Law, is based upon length of service and the employee's most recent monthly salary. This liability is primarily covered by regular deposits made by the Company into recognized severance and pension funds and by insurance policies purchased by the Company. The amounts so funded are not reflected on the balance sheets, since they are controlled by the fund trustees and insurance companies and are not under the control and management of the Company. For presentation of employees' termination benefits in accordance with U.S GAAP, see Note 20B.

Costs relating to employee termination benefits were approximately \$2,070, \$4,379 and \$3,126 for 2002, 2001 and 2000, respectively.

NOTE 13 - COMMITMENTS AND CONTINGENCIES

A. COMMITMENTS AND CONTINGENCIES RELATING TO FAB 2

Commencing April 2000, the Company entered into a series of agreements and arrangements related to the Company's Board of Directors' decision to establish a new 200 millimeters wafer fabrication facility in Israel ("Fab 2"). The total cost of Fab 2 is expected to be approximately \$1,500,000. Through December 31, 2002 the Company had entered into agreements, arrangements and other fund raisings, which are described in more detail below, with Wafer Partners, its principal shareholder, two leading Israeli banks, the Investment Center and others to provide an aggregate of \$1,146,000 of financing for Fab 2. The financing agreements and arrangements are subject to certain conditions, including the achievement of performance and financing milestones, and the securing of additional required financing. In addition, the Company has entered into agreements for the design and construction of Fab 2, for equipping Fab 2 and for the transfer to the Company of the process technologies to be utilized to produce wafers in Fab 2.

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NOTE 13 - COMMITMENTS AND CONTINGENCIES (cont.)

A. COMMITMENTS AND CONTINGENCIES RELATING TO FAB 2 (cont.)

The construction and equipping of Fab 2 is a substantial project, which requires extensive management involvement as well as the timely participation by and coordination of the activities of many participants. The Fab 2 project is a complex undertaking which entails substantial risks and uncertainties, including but not limited to those associated with the following: obtaining additional commitments to finance the construction and equipping of Fab 2, which as of the approval date of the financial statements amount to approximately \$58,000 to be raised by the end of 2003; achieving certain milestones and complying with various conditions and covenants under the current financing agreements in order to receive the additional funds committed by the Wafer Partners, Equity Investors and Investment Center, as well as those provided by the Facility Agreement with the Banks, which establishes significant additional conditions and covenants for borrowing loans under the facility Agreement; and completing the complex processes of transferring from Toshiba and Motorola the manufacturing technologies to be used at Fab 2 and development of new technologies. According to the Fab 2 agreements, raising the required additional funding by the dates specified, achieving the milestones as scheduled, and complying with all the conditions and covenants stipulated in all the Fab 2 agreements are material provisions for completing and equipping Fab 2. As of December 31, 2002 the construction and equipping of Fab 2 is currently in process and, in management's opinion, progressing according to schedule.

Through December 31, 2002 the Company had incurred approximately \$700,000 primarily in capitalized costs related to Fab 2, mostly for property and equipment and other assets. During 2001 and 2002, the Wafer Partners and Equity Investors invested in the Company an aggregate of \$308,185 (\$47,246 of which as long-term customers' advances), and received an aggregate of 31,129,845 Ordinary Shares of the Company; the Company received from the Banks long-term loans in the aggregate of \$244,000 and from the Investment Center an aggregate of \$84,200.

In connection with establishing Fab 2, the Company incurred during the year ended December 31, 2002 non-capitalizable expenses in the amount of \$27,610, of which \$15,591 was included in cost of sales and \$12,019 was included in marketing, general and administrative (during the year ended December 31, 2001 - \$10,585, \$3,756 and \$6,829, respectively; during the year ended December 31, 2000 - \$1,663, \$150 and \$1,513, respectively).

Net cash used in operating activities during the year ended December 31, 2002 (excluding an increase of \$29,336 in connection with long-term liability in respect of customers' advances) was \$28,403. That amount included net cash out flows in the amount of \$31,142 attributable to the establishing of Fab 2 (during the year ended December 31, 2001 - \$17,910, \$13,651 and \$12,248, respectively). Net cash provided by operating activities during the year ended December 31, 2000 (excluding \$760 decrease in connection with long-term liability in respect of customers' advances) was \$16,945. That amount included net cash out flows in the amount of \$1,414 attributable to the establishing of Fab 2.

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NOTE 13 - COMMITMENTS AND CONTINGENCIES (cont.)

A. COMMITMENTS AND CONTINGENCIES RELATING TO FAB 2 (cont.)

(1) TECHNOLOGY TRANSFER AGREEMENTS

TOSHIBA - In April 2000, the Company entered into a technology transfer agreement with Toshiba Corporation ("Toshiba"), a Japanese corporation. This agreement provides for the transfer by Toshiba to the Company of advanced semiconductor manufacturing process technologies installed in Fab 2 including related technology transfer assistance in exchange for certain fees for patent licenses, technology transfer and technical assistance and ongoing royalties based on sales of products manufactured in Fab 2 with the transferred technology. Under the Toshiba agreement, the Company agreed, subject to certain conditions, to reserve for Toshiba a certain portion of Fab 2 wafer manufacturing capacity for a period of 10 years.

MOTOROLA - In September 2002, the Company entered into a non-exclusive technology transfer, development and licensing agreement with Motorola Inc. ("Motorola"), a U.S. corporation. This agreement provides for the transfer by Motorola to the Company of existing and newly developed versions of advanced semiconductor manufacturing process technologies to be installed in Fab 2, and for the provision by Motorola of related technology transfer assistance, all in exchange for certain fees for patent and other intellectual property licenses, technology transfer and development, technical assistance and ongoing royalties based on sales of products manufactured in Fab 2 with the transferred technology. Subject to prior termination for cause by Motorola, the licenses under the agreement are perpetual.

(2) WAFER PARTNER AGREEMENTS

During 2000, the Company entered into various share purchase agreements ("Wafer Partner Agreements") with SanDisk Corporation, Alliance Semiconductor Corporation, Macronix International Co., Ltd. and QuickLogic Corporation (collectively, the "Wafer Partners") to partially finance the construction and equipping of Fab 2. Pursuant to the Wafer Partner Agreements, the Wafer Partners agreed to invest an aggregate of \$250,000 to purchase Ordinary Shares of the Company, over a period of time, subject to the achievement of certain milestones relating to the construction and operation of Fab 2. Under the Wafer Partner Agreements, each Wafer Partner has the right to waive the achievement of some or all of the milestones and other conditions precedent to its remaining investment. According to the Wafer Partner Agreements, the Company agreed, subject to certain conditions, to reserve for each Wafer Partner a certain portion of Fab 2 wafer manufacturing capacity for a period of 10 years.

Pursuant to the Wafer Partner Agreements and additional investments made by them as described in Note 14F, the Wafer Partners invested in the Company During 2002 and 2001, an aggregate of \$225,100, of which \$177,854 was credited as paid in capital and \$47,246 was established as long-term customer advances to be credited, in general, against purchases by the Wafer Partners. In consideration for their investments, the Wafer Partners received an aggregate of 19,857,532 Ordinary Shares of the Company (said amounts and shares reflect the 2002 and September 2001 amendments to the Wafer Partner Agreements described below). In addition to the Wafer Partner Agreements, in January 2002, the Company entered into a share purchase agreement with another wafer partner, pursuant to which that wafer partner invested \$2,000 in Fab 2 for the purchase of 332,945 Ordinary Shares of the Company. The shares were issued in January 2002.

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NOTE 13 - COMMITMENTS AND CONTINGENCIES (cont.)

A. COMMITMENTS AND CONTINGENCIES RELATING TO FAB 2 (cont.)

(2) WAFER PARTNER AGREEMENTS (cont.)

In February 2003, the primary Wafer Partners entered into amendments to their agreements with the Company, pursuant to which the primary Wafer Partners agreed to advance their fifth milestone installment payment, in the aggregate amount of \$33,002, regardless of its achievement. Of that amount, \$19,801 shall be paid immediately after obtaining all the approvals for the amendments as outlined below, and the remaining \$13,201 shall be paid subject to obtaining all the approvals as outlined below and to raising by the Company of an aggregate of \$22,000 (which, in case an approval from the Banks shall not be obtained, may increase up to \$26,000) (the "Additional Raising Amount") from specified financial sources, no later than December 31, 2003. In consideration for their investments, for the first installment the primary Wafer Partners will be issued fully-paid Ordinary Shares of the Company, based on the average closing sale price of the Company's Ordinary Shares for the 30 trading days prior to the date the Company's Board of Directors approves the amendments, and for the second installment, based on the price at which the Company raises the Additional Raising Amount from specified financial sources. The amendments are subject to their approval by the general meeting of the Company's shareholders, the Banks, the Investment Center, the Office of the Chief Scientist and the Israel Land Administration.

Pursuant to the abovementioned amendments, the Company granted the primary Wafer Partners an option to convert an aggregate of up to \$13,201 of the long-term customers' advances into fully-paid Ordinary Shares of the Company, the amount of which shall be determined based on the average closing sale price of the Company's Ordinary Shares for the 30 trading days prior to December 31, 2005. The option is exercisable during January 2006. In case such conversion occurred, and provided that the amount of shares issued is equivalent to or greater than 5% of the Company's outstanding share capital as of the conversion date, the Company undertook to procure that the Company's non Wafer Partner shareholders shall maintain their percentage of ordinary shares held in the Company immediately prior to the conversion of the long-term customers' advances. The price per share of the shares to be issued to the non Wafer Partner shareholders shall equal the conversion price.

During 2002, the Company and the Wafer Partners entered into amendments to their agreements with the Company, according to which the Wafer Partners undertook to advance both their third and fourth milestone installment payments, prior to their achievement, each in the aggregate amount of \$36,669. In consideration for their investment, the Wafer Partners were issued fully-paid Ordinary Shares of the Company equivalent to 60% of the aggregate amount invested by them. The remaining 40% of the advanced payments made by the Wafer Partners was established as long-term customer advances to be credited, in general, against future purchases by them. Under the amendments, the Ordinary Shares issued in consideration for the accelerated installments were issued based on the lower of the ATP and \$12.50.

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NOTE 13 - COMMITMENTS AND CONTINGENCIES (cont.)

A. COMMITMENTS AND CONTINGENCIES RELATING TO FAB 2 (cont.)

(3) INVESTMENTS BY EQUITY INVESTORS

During 2001 and 2002, Israel Corporation Technologies (IC-Tech) Ltd., a wholly owned subsidiary of Israel Corporation Ltd. and the principal shareholder of the Company ("IC-Tech"), Challenge Fund-Edgar II LP, a Delaware limited partnership ("Challenge"), and Ontario Teachers' Pension Plan Board ("OTPP") (all together, "Equity Investors") invested in the Company, pursuant to agreements described below, an aggregate of \$71,085, for the purchase of an aggregate of 10,166,701 Ordinary Shares of the Company.

In December 2000, the Company entered into a share purchase agreement ("IC-Tech Agreements") pursuant to which IC-Tech agreed to invest \$50,000 to purchase Ordinary Shares of the Company over a period of time in several mandatory closings contemporaneous with the closings under the Wafer Partner Agreements and subject to the achievement of the same milestones, at a price of the lower of \$30.00 and the ATP, provided that for any specific closing the ATP shall not be less than \$12.50. Under the IC-Tech Agreements, IC-Tech has the right to waive the achievement of some or all of the milestones and other conditions precedent to its remaining investment. For additional investments made by IC-Tech in connection with a rights offering, see Note 14F.

In February 2001, the Company entered into a share purchase agreement with Challenge pursuant to which Challenge agreed to invest \$5,000 in Fab 2 for the purchase of Ordinary Shares of the Company under terms substantially similar to those under the Company's agreements with IC-Tech.

In February 2003, IC-Tech and Challenge entered into amendments to their agreements with the Company, pursuant to which IC-Tech and Challenge agreed to advance their fifth milestone installment payment, in the amount of \$8,067, regardless of its achievement. Of that amount, \$4,840 shall be paid immediately after obtaining all the approvals for the amendments as outlined below, and the remaining \$3,227 shall be paid subject to obtaining all the approvals as outlined below and to raising by the Company of an aggregate of \$22,000 (which, in case an approval from the Banks shall not be obtained, may increase up to \$26,000) (the "Additional Raising Amount") from specified financial sources, no later than December 31, 2003. In consideration for their investments, for the first installment IC-Tech and Challenge will be issued fully-paid Ordinary Shares of the Company, based on the average closing sale price of the Company's Ordinary Shares for the 30 trading days prior to the date the Company's Board of Directors approves the amendments, and for the second installment, based on the price at which the Company raises the Additional Raising Amount from specified financial sources. The amendments are subject to their approval by the general meeting of the Company's shareholders, the Banks, the Investment Center, the Office of the Chief Scientist and the Israel Land Administration.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
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NOTE 13 - COMMITMENTS AND CONTINGENCIES (cont.)

A. COMMITMENTS AND CONTINGENCIES RELATING TO FAB 2 (cont.)

(3) INVESTMENTS BY EQUITY INVESTORS (cont.)

Through April 2002, the Company, IC-Tech and Challenge entered into amendments to their agreements with the Company according to which, IC-Tech and Challenge undertook to advance both their third and fourth milestone installment payments, prior to their achievement. In consideration for their investment IC-Tech and Challenge were issued fully-paid Ordinary Shares of the Company equivalent to 100% of the aggregate amount invested by them. Under the amendments, the Ordinary Shares issued in consideration for the accelerated installments were issued based on the lower of the ATP and \$12.50.

In July 2002, the Company entered into a definitive agreement with OTPP for an investment, which was fully paid in October 2002, of \$15,000 in the Company's equity in consideration for 3,000,000 Ordinary Shares of the Company for \$5.00 per share (the same as the subscription price per right in the rights offering described in Note 14F), and a warrant, exercisable for a four-year period, to purchase an additional 1,350,000 Ordinary Shares of the Company, at an exercise price of \$7.50 per share (subject to customary adjustments). Pursuant to the agreement, OTPP may not sell these securities for a period of nine months from the closing date of the agreement (October 2002).

(4) FACILITY AGREEMENT

In January 2001, the Company entered into a credit facility agreement with two leading Israeli banks ("Banks") entitling the Company to borrow an aggregate, as amended in January 2002, of \$500,000 to finance the construction and equipping of Fab 2 ("Facility Agreement"). The loans shall bear interest at a rate of Libor plus approximately 1.5% per annum payable at the end of each quarter. The loans are available for withdrawal through December 31, 2004 and are to be repaid in 16 or 12 equal consecutive quarterly installments, commencing two or three years, respective to the number of installments, after the loan is received. The loans are subject to certain prepayment provisions. Unused amounts under the Facility Agreement, in the amount of \$240,000 as of December 31, 2002, are subject to a quarterly commitment fee of 0.25% per annum.

According to the Facility Agreement with the Banks, as amended during 2002, the Company is obligated to raise \$144,000 from specified financial sources, other than the already committed funds by the Wafer Partners and Equity Investors, as follows: by the end of 2002, an aggregate of \$110,000 and by the end of 2003, an aggregate of \$144,000. The Company submitted a request to the Banks for amending the Facility Agreement by deferring the raising dates to be as follows: by the end of 2002, an aggregate of \$84,000; by the end of April 2003, an aggregate of \$110,000; and during 2004, an aggregate of \$144,000. Based on discussions held subsequent to the balance-sheet date with the Banks, management estimates that obtaining such a deferral is probable. According to the Facility Agreement, raising these amounts by the dates stated is a material provision.

NOTE 13 - COMMITMENTS AND CONTINGENCIES (cont.)

A. COMMITMENTS AND CONTINGENCIES RELATING TO FAB 2 (cont.)

(4) FACILITY AGREEMENT (cont.)

According to the Facility Agreement, the Company is obligated to comply with certain financial ratios, primarily total shareholders' equity to total assets, and substantial additional covenants in connection with the establishment of Fab 2 as stipulated in such agreement, primarily production and capacity milestones. As of December 31, 2002, the Company was in full compliance with the financial ratios and covenants, except for raising an amount of \$26,000 from specified financial sources by December 31, 2002 as provided by the Facility Agreement with the Banks. As of the approval date of the financial statements, an amount of \$2,250 was raised towards the \$26,000. As stated in the previous paragraph, the Company submitted a request to the Banks for amending the Facility Agreement by deferring the raising date from December 31, 2002 to April 30, 2003, and management estimates that obtaining such an amendment is probable.

Under the Facility Agreement and the terms of the Company's long-term loans as of December 31, 2002, the Company agreed to register liens in favor of the Banks on substantially all its present and future assets.

With regard to options granted to the Banks, see Note 14B(5)(a); with regard to loans drawn towards the \$500,000 credit facility, see Note 10A.

(5) FAB 2 CONSTRUCTION AGREEMENT

In August 2000, the Company entered into a fixed price turn-key agreement with a contractor for the design and construction of Fab 2 in consideration of approximately \$200,000, to be paid according to certain performance milestones stipulated in the agreement, over approximately two years. As of December 31, 2002, approximately \$170,000 of that amount had already been paid by the Company.

(6) APPROVED ENTERPRISE STATUS

In December 2000, the Investment Center approved an investment program in connection with Fab 2 for expansion of the Company's plant. The approval certificate for the program provides for a benefit track entitling the Company to investment grants at a rate of 20% of qualified investments of up to \$1,250,000. The grants are to be made in accordance with a timetable set forth in the approval certificate for the program.

Under the terms of the approval certificate, investments in respect of the Fab 2 approved enterprise program are to be completed by December 31, 2005.

(7) AGREEMENT WITH THE ILA

In November 2000, the Company entered into a Development Agreement with the Israel Land Administration ("ILA") with respect to a parcel of land designated for the construction of Fab 2. Following the completion of the construction of Fab 2 on the land, the Company will enter into a long-term lease agreement with the ILA for a period ending in 2049. The lease payments through 2049 relating to this lease have been paid in advance.

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NOTE 13 - COMMITMENTS AND CONTINGENCIES (cont.)

A. COMMITMENTS AND CONTINGENCIES RELATING TO FAB 2 (cont.)

(8) HEDGING ACTIVITIES

For hedging transactions and agreements the Company has entered into, see Note 18C.

(9) OTHER AGREEMENTS AND LETTERS OF CREDIT

Through December 31, 2002 the Company had entered into several additional agreements related mainly to the construction, equipping and transfer of technology for Fab 2. The Company's aggregate commitment in connection with these agreements as of such date, including the Fab 2 construction agreement described in paragraph (5) above, amounted to \$125,130.

B. LICENSE AGREEMENTS

- (1) In June 2000, the Company entered into a cross license agreement with a major technology company. According to the agreement, each party acquired a non-exclusive license under the other's patents. The Company agreed to pay an annual royalty through July 2005. The licenses terminate on December 31, 2005.
- (2) In December 2001, the Company and DSP Group Ltd. ("DSPG") entered into a license agreement, pursuant to which DSPG granted the Company a personal, non-exclusive, nontransferable license to use certain technology in the Company's products, in exchange for license fee and ongoing royalties to be paid by either the Company or its customers based on sales of products manufactured in Fab 2 based on the technology. In addition, the agreement provides for technical support by DSPG in connection with using the technology. The license terminates on December 31, 2007.
- (3) In May 2002, the Company entered into a joint development and royalty-free, non-exclusive cross-license agreement with a Japanese semiconductor manufacturer corporation, for the joint development of certain technology to be used by the Company in its Fab 2 and by the Japanese manufacturer in its facilities. The agreement calls for certain amounts to be paid by the Japanese manufacturer to the Company following the signing of the agreement and subject to achievement of certain milestones, through a period ending 2005. Pursuant to the agreement, the Japanese manufacturer may allocate, subject to certain conditions stipulated in the agreement, part or all of the second half of the total amounts paid by it to the Company as long-term customer advances to be applied against future purchases made by the Japanese manufacturer through 2007. Sales for 2002 include a \$8,056 revenue in relation to this agreement.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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NOTE 13 - COMMITMENTS AND CONTINGENCIES (cont.)

C. LEASES

- (1) The Company's offices and engineering and manufacturing operations are located in a building complex situated in an industrial park in Migdal Ha'emek, in the northern part of Israel. These premises are currently occupied under a long-term lease from the Israel Lands Authority, which expires in 2032. The Company has no obligation for lease payments related to this lease through the year 2032.
- (2) The Company occupies certain other premises under various operating leases. The obligations under such leases were not material as of December 31, 2002.
- (3) See also paragraph A(7) above.

D. PURCHASE AGREEMENTS

The Company from time to time enters into long-term purchase agreements with customers. Pursuant to such agreements, the Company is committed to sell, and the customer is committed to purchase (subject to reductions in certain circumstances), a specific monthly output derived from the start of processing of silicon wafers at prices which are stipulated in the agreements and are subject to periodic re-negotiations. From commencement of the Company's operations through December 31, 2002, a substantial portion of the Company's production has been sold under such agreements.

E. PROFIT SHARING PLAN

The Company maintains an employee profit sharing plan. No amounts were provided for under this plan for periods presented in these financial statements, since the Company did not record profits for these periods.

F. OTHER PRINCIPAL AGREEMENTS

- (1) In December 2000, the Company and Macronix entered into an agreement according to which the Company waived in favor of Macronix certain exclusive semiconductor manufacturing rights it received from Saifun.
- (2) Pursuant to an agreement between the Company and Saifun signed in October 1997, the Company has certain exclusive semiconductor manufacturing rights for certain licensed technology. The agreement also sets certain limitations on Saifun regarding future licensing of such technology (see (1) above). Pursuant to certain provisions of the agreement, the Company and Saifun are obligated, under certain circumstances, to pay each other royalties. For royalty amounts received and payable by the Company under the agreement, see Note 19B.
- (3) The Company, from time to time in the normal course of business, enters into long-term agreements with various entities for the joint development of products and processes utilizing technologies owned by both the other entities and the Company.
- (4) The Company maintains certain agreements with various intellectual property providers under which the Company is to pay certain royalties.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
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NOTE 13 - COMMITMENTS AND CONTINGENCIES (cont.)

G. ENVIRONMENTAL AFFAIRS

The Company's operations are subject to a variety of laws and governmental regulations in Israel relating to the use, discharge and disposal of toxic or otherwise hazardous materials used in the production processes. Operating permits are required for the operations of the Company's facilities and these permits are subject to revocation, modification and renewal. Government authorities have the power to enforce compliance with these regulations and permits and violators are subject to civil and criminal penalties, including fines, injunctions or both. As of December 31, 2002 the Company operated under a permit provided by the Ministry of Environmental Affairs in force as long as the Company is in compliance with its terms. In management's opinion, the Company is substantially in compliance with the material aspects of this permit and applicable laws and regulations.

H. OTHER COMMITMENTS

Receipt of certain research and development grants from the government of Israel is subject to various conditions. In the event the Company fails to comply with such conditions, the Company may be required to repay all or a portion of the grants received. In management's opinion, the Company has been in full compliance with the conditions through December 31, 2002.

NOTE 14 - SHAREHOLDERS' EQUITY

A. DESCRIPTION OF ORDINARY SHARES

As of December 31, 2002 and 2001, the Company had 70,000,000 authorized par value NIS 1.00 Ordinary Shares, of which 43,435,532 and 24,997,102, respectively, were issued and outstanding (net of 1,300,000 Ordinary Shares held by the Company as of such dates). As of December 31, 2002, the Company was engaged in agreements and arrangements to issue no fewer than 9,993,935 and no more than 10,370,379 additional Ordinary Shares of the Company. These amounts include Ordinary Shares to be issued under various agreements according to their provisions as of December 31, 2002 related to Fab 2 investors, the exercise of all options granted and issued to non-employees and the conversion of all the convertible debentures.

Holders of Ordinary Shares are entitled to participate equally in the payment of cash dividends and bonus share (stock dividend) distributions and, in the event of the liquidation of the Company, in the distribution of assets after satisfaction of liabilities to creditors. Each ordinary share is entitled to one vote on all matters to be voted on by shareholders.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
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NOTE 14 - SHAREHOLDERS' EQUITY (cont.)

B. SHARE OPTION PLANS

(1) EMPLOYEE SHARE OPTIONS

- (A) GENERAL - The Company has granted to its employees options to purchase its Ordinary Shares under several option plans adopted by the Company since 1994 through 2002. The particular provisions of each plan and individual grant vary as to vesting period, exercise price, exercise period and other terms. Generally, the options are granted at an exercise price which equals to not less than 85% of the market value of the Ordinary Shares at the date of grant (through December 31, 2002, most of the options were granted at an exercise price equal to the market value of the underlying shares at the date of grant); vest over a three to four-year period according to various vesting schedules; and are not exercisable beyond ten years from the first grant date under each plan.
- (B) OPTIONS GRANTED TO CERTAIN EMPLOYEES IN MAY 1998 - In April 2000, the Board of Directors of the Company approved certain changes in the terms of these options which would allow the determination as of such date of a fixed aggregate unearned compensation expense for all options granted under the plan. As a result, commencing April 2000, options under the plan are accounted for under "fixed plan" accounting. The aggregate unearned compensation related to the plan as of April 2000 of \$2,142, is being amortized over the relevant amortization periods. The statement of operations for the year ended December 31, 2000 includes amortization of unearned compensation of \$1,691, of which \$1,103, \$420, and \$168, were recorded in cost of sales, research and development and marketing, general and administrative expenses, respectively. Total amortization for 2002 and 2001 amounted to \$142 and \$283, respectively.
- (C) OPTIONS GRANTED TO A DIRECTOR IN 2000 AND 2001 - During 2000 and 2001, the Audit Committee, the Board of Directors of the Company and the general meeting of the Company's shareholders approved the grant of options to purchase up to 50,000 and 21,500, respectively, Ordinary Shares of the Company to a director of the Company at an exercise price of \$20.00 and \$10.75, respectively, per share, the market price of the Company's shares on the dates of grant. The first third of the options vested upon grant and the remaining two thirds vest through August 2002 and August 2003, respectively. The options may be exercised for a period of three years from the date on which they become vested.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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NOTE 14 - SHAREHOLDERS' EQUITY (cont.)

B. SHARE OPTION PLANS (cont.)

(1) EMPLOYEE SHARE OPTIONS (cont.)

- (D) OPTIONS GRANTED TO THE CO-CEOS IN OCTOBER 1998 AND MAY 2001 - In October 1998 and May 2001, the Board of Directors of the Company approved share option plans pursuant to which each of the Company's two Co-Chief Executive Officers was granted the right to purchase up to 300,000 and 100,000, respectively, Ordinary Shares of the Company at an exercise price of \$7.00 and \$11.81, respectively, the market price of the Company's shares on the dates of grant. Due to the fulfillment during 2000 of accelerated vesting criteria provided by the October 1998 plan, as of December 31, 2002 all the options under this plan are fully vested and may be exercised for a period of five years from the date they became exercisable. Options granted under the May 2001 plan are exercisable for a period of ten years, and vest over a four-year period according to various vesting schedules.
- (E) OPTIONS GRANTED IN JULY 2001 TO NON-EMPLOYEE DIRECTORS - During 2001, the Audit Committee, the Board of Directors of the Company and the general meeting of the Company's shareholders approved a stock option plan pursuant to which the Company's Board members will be granted options to purchase up to 400,000 Ordinary Shares of the Company (40,000 to each eligible director appointed to the Board of Directors) at an exercise price equal to the market price of the Company's shares on the grant dates (weighted average exercise price of approximately \$8.48). As of December 31, 2002 280,000 options were outstanding under the plan. Options granted shall vest over a four-year period according to various vesting schedules, and may not be exercisable, in general, beyond five years from the date upon which they first become exercisable.
- (F) OPTIONS AVAILABLE FOR GRANT - As of January 1, 2003, there were 2,344,489 options available for grant, which had not yet been designated for identified employees and directors.

In September 2000, the Company's Board of Directors provided that on January 1 of each year commencing January 1, 2001 and ending January 1, 2005, the total number of options available for grant under all the Company's share option plans is to be increased by an amount equal to 4% of the outstanding Ordinary Shares of the Company on such date, provided that the maximum number of options available for grant at any time shall not exceed 12% of the outstanding Ordinary Shares of the Company, and that additional options may not be granted if the total number of unvested options outstanding under all the Company's share option plans exceeds 12% of the outstanding Ordinary Shares of the Company. Accordingly, in January 2003, 2002 and 2001, 1,737,421, 999,884 and 490,504 options, respectively, were added to the Company's share option plans, available for grant subject to the general terms described in paragraph (a) above.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
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NOTE 14 - SHAREHOLDERS' EQUITY (cont.)

B. SHARE OPTION PLANS (cont.)

(2) SUMMARY OF THE STATUS OF ALL THE COMPANY'S EMPLOYEE SHARE OPTION PLANS

A summary of the status of all the Company's employee share option plans as of December 31, 2002, 2001 and 2000, as well as changes during each of the years then ended, is presented below (for options granted to the Banks and a consultant, see paragraph B(5) below):

	2002		2001		2000	
	Number of share options	Weighted average exercise price	Number of share options	Weighted average exercise price	Number of share options	Weighted average exercise price
Outstanding as of beginning of year	3,717,770	\$ 11.94	2,376,543	\$ 13.34	1,894,773	\$ 8.08
Granted	905,724	5.82	1,583,722	10.20	871,300	23.06
Exercised	--		(31,154)	8.76	(299,013)	8.83
Terminated	--		--		--	
Forfeited	(375,596)	10.27	(211,341)	15.30	(90,517)	11.06
Outstanding as of end of year	4,247,898	10.79	3,717,770	11.94	2,376,543	13.34
Options exercisable as of end of year	1,299,531	10.49	1,080,867	7.79	1,146,972	9.08

(3) SUMMARY OF INFORMATION ABOUT EMPLOYEE SHARE OPTIONS OUTSTANDING

The following table summarizes information about employee share options outstanding as of December 31, 2002:

Range of exercise prices	Outstanding as of December 31, 2002			Exercisable as of December 31, 2002	
	Number outstanding	Weighted average remaining contractual life (in years)	Weighted average exercise price	Number exercisable	Weighted average exercise price
3.45 - 5.96	180,199	9.43	5.02	--	--
6.00 - 6.94	732,026	8.95	6.01	--	--
7.00 - 7.99	740,850	3.02	7.03	727,500	7.02
8.06 - 8.99	623,766	5.43	8.54	223,264	8.65
9.06 - 9.81	68,094	3.79	9.22	56,844	9.19
10.00 - 10.89	928,871	8.26	10.42	35,996	10.49
11.81 - 11.81	200,000	8.41	11.81	--	--
12.13 - 17.19	103,512	6.49	13.47	44,842	13.40
18.75 - 18.75	87,000	7.26	18.75	--	--
20.00 - 25.00	583,580	7.31	24.48	211,085	24.13
	4,247,898			1,299,531	

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NOTE 14 - SHAREHOLDERS' EQUITY (cont.)

B. SHARE OPTION PLANS (cont.)

(4) WEIGHTED AVERAGE GRANT-DATE FAIR VALUE OF OPTIONS GRANTED TO EMPLOYEES

The weighted average grant-date fair value of the 905,724, 1,583,722 and 871,300 options granted during 2002, 2001 and 2000 to employees and directors amounted to \$2.83, \$6.95 and \$18.85 per option, respectively. The Company utilized the Black-Scholes option pricing model to estimate fair value, utilizing the following assumptions for the years 2002, 2001 and 2000 (all in weighted averages):

	2002 ----	2001 ----	2000 ----
Risk-free interest rate	2.8%	4.25%	5.50%
Expected life of options	4.82 years	4.80 years	5.05 years
Expected annual volatility	56%	87%	115%
Expected dividend yield	None	None	None

(5) NON-EMPLOYEE SHARE OPTIONS

(A) BANKS - In January 2001, as part of the Facility Agreement described in Note 13A(4), the Banks received an aggregate of 400,000 options to purchase Ordinary Shares of the Company (200,000 each) at an exercise price, as amended in December 2001, of \$6.20 per share. As of December 31, 2002, all of the options are fully vested. The options are exercisable for a five-year period ending January 2006.

In lieu of paying the exercise price in cash as described below, the Banks are entitled to exercise the options on a "cashless" basis, i.e. by forfeiting all or part of the option in exchange for ordinary shares equal to the aggregate fair market value of the shares underlying the options forfeited less the aggregate exercise price.

The cost of the option award granted to the Banks, determined based on the fair value at the grant and amendment dates in accordance with SFAS 123, amounted to a total of \$5,466. Such amount is amortized as financing expense over the terms of the loans under the Facility Agreement.

(B) CONSULTANT - In return for services provided to the Company by a consultant in connection with obtaining certain agreements relating to Fab 2, the Company awarded the consultant with options, which were fully expired in August 2001. The cost of the options award granted to the consultant, determined based on the fair value at the relevant measurement dates in accordance with SFAS 123, amounted to \$1,576. Of that amount \$524 was attributed to the technology transfer agreement with Toshiba and would be amortized over relevant terms of such agreement (Note 13A(1)). The remaining \$1,052 was attributed to issuance of Ordinary Shares to certain Wafer Partners and was included in paid-in capital as equity investment received from the Wafer Partners (Note 13A(2)).

The Company utilized the Black-Scholes option pricing model to estimate fair values of options granted to non-employees, utilizing the assumptions similar to those presented in paragraph B(4) above.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except share data and per share data)

NOTE 14 - SHAREHOLDERS' EQUITY (cont.)

B. SHARE OPTION PLANS (cont.)

(6) PRO FORMA LOSS PER SHARE ACCORDING TO SFAS 123 AND SFAS 148

Had compensation cost for the Company's share option plans been determined based on fair value at the grant dates for all awards made in 2002, 2001 and 2000 in accordance with SFAS 123, as amended by SFAS 148, the Company's pro forma loss per share would have been as follows:

	2002 ----	2001 ----	2000 ----
PRO FORMA LOSS			
Loss for the year, as reported	\$ (51,402)	\$ (38,522)	\$ (3,989)
Less - stock-based compensation determined under APB-25	142	283	1,691
Add - stock-based compensation determined under SFAS 123	(7,476)	(6,209)	(3,207)
	-----	-----	-----
Pro forma loss	<u>\$ (58,736)</u>	<u>\$ (44,448)</u>	<u>\$ (5,505)</u>
	=====	=====	=====
PRO FORMA BASIC LOSS PER SHARE			
As reported	<u>\$ (1.63)</u>	<u>\$ (1.92)</u>	<u>\$ (0.26)</u>
	=====	=====	=====
Pro forma	<u>\$ (1.87)</u>	<u>\$ (2.27)</u>	<u>\$ (0.59)</u>
	=====	=====	=====

C. TREASURY STOCK

During 1998, the Board of Directors of the Company authorized, subject to certain conditions, the purchase of up to 1,400,000 Ordinary Shares to facilitate the exercise of employee stock options under the Company's share option plans. During 1999 and 1998, the Company funded the purchase by a trustee of 142,500 and 1,157,500, respectively, of the Company's Ordinary Shares.

D. DIVIDEND DISTRIBUTIONS

According to the Facility Agreement (Note 13A(4)), the Company undertook not to distribute any dividends prior to January 1, 2006. Any dividend distributions after that date shall be subject to provisions stipulated in such agreement.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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NOTE 14 - SHAREHOLDERS' EQUITY (cont.)

E. SALE OF SECURITIES

In January, 2002, the Company issued, based on a prospectus published in January, 2002 in Israel, the following securities, which are listed on the Tel Aviv Stock Exchange, for initial proceeds of approximately \$23,200. Costs related to the prospectus and issuance of the securities were approximately \$1,750.

- (1) CONVERTIBLE DEBENTURES - NIS 110,579,800 principal amount of convertible debentures, under terms described in Note 11.
- (2) OPTIONS (SERIES 1) - 2,211,596 options (Series 1) for no consideration. Each option (Series 1) is exercisable into one Ordinary Share of the Company until January 20, 2006 for an exercise price of NIS 39 (subject to customary adjustments), linked to the CPI (as of December 31, 2002 - NIS 41.65, \$8.79).
- (3) OPTIONS (SERIES A) - 552,899 options (Series A) for no consideration, to purchase additional debentures. These options, none of which were exercised, expired in March 2002.

See Note 20E for the disclosure of the accounting treatment of the sale of these securities under U.S. GAAP.

F. RIGHTS OFFERING

In October 2002, the Company issued, based on a right offering prospectus published in September 2002 in Israel and in the U.S., 4,098,365 Ordinary Shares of the Company and 1,844,262 warrants to purchase Ordinary Shares of the Company, in consideration for an aggregate of immediate proceeds of \$20,492. Of these amounts, 4,086,038 Ordinary Shares and 1,838,715 warrants were issued to Wafer Partners and Equity Investors in consideration for an aggregate of \$20,430. Each warrant may be exercised for the purchase of one Ordinary Share at an exercise price of \$7.50 for a period ending on October 31, 2006. The securities issued are listed on the NASDAQ and the Tel Aviv Stock Exchange. Costs in relation to the prospectus and the issuance of the securities were approximately \$800.

The rights were distributed in an offering of rights to all shareholders of the Company and employees, who held options entitling them to participate in the rights offering. Each recipient received one right for each 4.94 Ordinary Shares or employee options that he held on September 30, 2002. Each full right entitled the recipient to purchase, at a subscription price of \$5.00, one Ordinary Share and 0.45 of a warrant. All rights not exercised expired in October, 2002.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except share data and per share data)

NOTE 15 - INFORMATION ON GEOGRAPHIC AREAS AND MAJOR CUSTOMERS

A. SALES BY GEOGRAPHIC AREA (as percentage of total sales)

	Year ended December 31,		
	2002	2001	2000
	----	----	----
United States	62 %	69 %	90 %
Far East - in 2002, primarily Japan; in 2001 and 2000, primarily Taiwan	25	18	7
Europe	11	10	3
Israel	2	3	--
	-----	-----	-----
Total	100 %	100 %	100 %
	=====	=====	=====

B. LONG-LIVED ASSETS BY GEOGRAPHIC AREA - Substantially all of the Company's long-lived assets are located in Israel.

C. MAJOR CUSTOMERS (as percentage of total sales)

	Year ended December 31,		
	2002	2001	2000
	----	----	----
Customer A	31%	30%	30 %
Customer B	16	--	--
Customer C	13	17	28
Customer D	--	1	11
Other customers (*)	21	28	16

(*) Represent sales to five different customers each of whom accounted for between 2% and 7% of sales during 2002; to five customers (2%-8%) during 2001; and to five customers (2%-6%) during 2000.

As of December 31, 2002 and 2001, the above major customers constituted the majority of the trade accounts receivable reflected on the balance sheets.

NOTE 16 - FINANCIAL INCOME (EXPENSE), NET

Financial income (expense), net consist of the following:

	Year ended December 31,		
	2002	2001	2000
	----	----	----
Financial expenses (primarily bank loan interest)	\$ (11,669)	\$ (3,365)	\$ (923)
Financial expenses in relation to convertible debentures	(1,101)	--	--
Less capitalized interest - Note 6A(3)	10,260	1,328	--
	-----	-----	-----
Financial income (primarily bank deposit interest)	(2,510) 406	(2,037) 3,502	(923) 2,317
	-----	-----	-----
Financing income (expense), net	\$ (2,104)	\$ 1,465	\$ 1,394
	=====	=====	=====

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
 (dollars in thousands, except share data and per share data)

NOTE 17 - INCOME TAXES

A. APPROVED ENTERPRISE STATUS

Substantially all of the Company's existing facilities as of December 31, 2002 have been granted approved enterprise status, as provided by the Israeli Law for the Encouragement of Capital Investments - 1959 ("Investments Law") (see Note 6B).

The tax benefits derived from approved enterprise status relate only to taxable income attributable to approved enterprise investments. Pursuant to the Investments Law and the approval certificates for the Company's approved enterprise programs, the Company's income attributable to its various approved enterprise investments is taxed at a rate of up to 25% through periods ending between 2003 and 2012. Taxable income attributable to Fab 2 shall be tax-exempt for the first two years it arises. The portion of the Company's taxable income that is not attributable to approved enterprise investments is taxed at a rate of 36% (regular "Company Tax").

The tax benefits are also conditioned upon fulfillment of the requirements stipulated by the Investments Law and the regulations promulgated there under, as well as the criteria set forth in the certificates of approval. In the event of a failure by the Company to comply with these conditions, the tax benefits could be canceled, in whole or in part, and the Company would be required to refund the amount of the canceled benefits, plus interest and certain inflation adjustments. In management's opinion, the Company has been in compliance with the conditions through the approval date of the financial statements (see Note 6B).

B. COMPONENTS OF DEFERRED TAX ASSET/LIABILITY

The following is a summary of the components of the deferred tax benefit and liability reflected on the balance sheets as of the respective dates:

	AS OF DECEMBER 31,	
	2002	2001
	----	----
DEFERRED TAX BENEFIT - CURRENT		
Accrued vacation pay	\$ 582	\$ 440
Other	82	85
	-----	-----
	664	525
Valuation allowance	(664)	(525)
	-----	-----
Total current deferred tax benefit	\$ --	\$ --
	=====	=====
NET DEFERRED TAX BENEFIT - LONG-TERM		
Deferred tax asset -		
Net operating loss carryforward	\$ 19,094	\$14,844
Research and development	2,759	1,614
Liability for employee rights upon severance	781	517
Other	--	222
	-----	-----
	22,634	17,197
Valuation allowance	(17,229)	(12,348)
	-----	-----
Deferred tax liability - Depreciation	5,405	4,849
	(5,405)	(4,849)
	-----	-----
Total net long-term deferred tax benefit	\$ --	\$ --
	=====	=====

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except share data and per share data)

NOTE 17 - INCOME TAXES (cont.)

C. EFFECTIVE INCOME TAX RATES

The reconciliation of the statutory tax rate to the Company's effective tax rate is as follows:

	Year ended December 31,		
	2002	2001	2000
Israeli statutory rate	(36)%	(36)%	(36)%
Reduced tax rate for approved enterprise	16	16	16
Tax benefits for which deferred taxes were not recorded	10	22	10
Prior years additional income tax	--	--	14
Permanent differences and other, net	10	(2)	10
	-----	-----	-----
	-- %	-- %	14%
	====	====	====

D. NET OPERATING LOSS CARRYFORWARD

As of December 31, 2002, the Company had net operating loss carryforwards for tax purposes of approximately \$95,000, which may be carried forward for an unlimited period of time.

E. FINAL TAX ASSESSMENTS

The Company possesses final tax assessments through the year 1998.

NOTE 18 - FINANCIAL INSTRUMENTS

A financial instrument is defined as cash, evidence of an ownership interest in an entity, or a contract that imposes on one entity a contractual obligation either to deliver or receive cash or another financial instrument to or from a second entity. Examples of financial instruments include cash and cash equivalents, trade accounts receivable, loans, investments, trade accounts payable, accrued expenses, options and forward contracts.

The Company makes certain disclosures with regard to financial instruments, including derivatives. These disclosures include, among other matters, the nature and terms of derivative transactions, information about significant concentrations of credit risk, and the fair value of financial assets and liabilities.

See Note 20C for disclosure related to the Company's derivatives financial instruments in accordance with U.S. GAAP.

A. HEDGING ACTIVITIES

The Company, from time to time, enters into foreign currency derivatives to hedge its foreign currency exposure to equipment purchase commitments and other firm commitments denominated in foreign currency (primarily Japanese Yen and Euro). In that regard, the Company generally uses foreign currency forward contracts and options (zero-cost cylinder) as hedging instruments for foreign currency exposure. Accordingly, if the hedge is determined to be effective all changes in value attributed to spot rate fluctuations as well as the premium of forward contracts and the time value of options at inception are deferred until the hedged item is recognized (i.e., receipt of the equipment). The time value of options at inception is amortized on a straight-line basis.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except share data and per share data)

NOTE 18 - FINANCIAL INSTRUMENTS (cont.)

A. HEDGING ACTIVITIES (cont.)

In addition, the Company, from time to time, enters into agreements to hedge variable interest rate exposure on long-term loans (see Note 10). In order to hedge the cash flow related to this exposure, the Company uses various types of derivative contracts, consisting primarily of interest rate caps, floors and collars. If the hedge is determined to be effective, the changes in the intrinsic value of the derivative contracts are deferred and recognized in results of operations as interest payments become due. The time value of options at inception is recognized in earnings on a straight-line basis. When the related debt is issued in connection with the acquisition of assets not yet placed into operations, interest costs and gains and losses on the derivative contracts are capitalized to the related asset.

The Company does not hold or issue derivative financial instruments for non-hedging purposes.

B. CREDIT RISK OF FINANCIAL INSTRUMENTS, INCLUDING DERIVATIVES

The face or contract amounts of derivatives do not represent amounts exchanged by the parties and, accordingly, are not a measure of the exposure of the Company through its use of derivatives.

The Company is exposed to credit-related losses in respect of derivative financial instruments in a manner similar to the credit risk involved in the realization or collection of other types of assets. In management's estimation, due to the fact that derivative financial instrument transactions are entered into solely with financial institution counterparties, it is not expected that such counterparties will fail to meet their obligations. Substantially all remaining financial instruments held by the Company are due from governmental entities and, accordingly, the Company's credit risk in respect thereof is negligible.

C. PRESENTATION OF HEDGING ACTIVITIES IN THE FINANCIAL STATEMENTS

- (1) As of December 31, 2002, the Company had an outstanding foreign exchange agreements (options) to hedge exposure related to the purchase of machinery and equipment in an aggregate of \$44,032 (as of December 31, 2001 - \$0). The agreements resulted in 2002 in a gain of \$3,062 of which \$2,770 was capitalized to fixed assets; in 2001 - in a loss of \$4,462 from forward transactions of which \$4,564 was capitalized to fixed assets; in 2000 - in a gain of \$115 from foreign exchange agreements and options which were reflected primarily in cost of sales.
- (2) As of December 31, 2002, the Company had an outstanding agreements to hedge interest rate exposure on loans to be withdrawn under the Facility Agreement, the aggregate amount of which was \$212,000, all of which is attributable to Fab 2 (as of December 31, 2001 - \$172,000 of which \$152,000 is attributable to Fab 2). These agreements resulted in 2002 in a loss of \$3,707 of which \$3,593 was capitalized to property and equipment (as of December 31, 2001 - \$463 and \$344, respectively).

D. FAIR VALUE OF FINANCIAL INSTRUMENTS

The estimated fair values of the Company's financial instruments, excluding the Company's agreements to hedge interest rate exposure on long-term loans, did not materially differ from their respective carrying amounts as of December 31, 2002 and 2001. The fair value of the interest rate hedging transactions as of December 31, 2002 would have resulted in an unrealized capitalizable loss of \$11,952 (in 2001 - \$3,605).

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
 (dollars in thousands, except share data and per share data)

NOTE 19 - RELATED PARTIES BALANCES AND TRANSACTIONS

A. BALANCES

	As of December 31,	
	2002	2001
	----	----
Trade accounts receivable	\$ 583	\$ 410
	=====	=====
Current liabilities	\$ 6	\$ 128
	=====	=====

B. TRANSACTIONS

	Year ended December 31,		
	2002	2001	2000
	----	----	----
Sales	\$ 3,836	\$ 4,339	
	=====	=====	
Management fees	\$ 480		\$ 480
	=====		=====
Purchases of raw materials	\$ 209	\$ 2,460	
	=====	=====	
Development costs - Note 5B	\$ 102	\$ 225	
	=====	=====	
Expense reimbursements	\$ 278	\$ 290	\$ 57
	=====	=====	=====
Royalties received - Note 13F(2)		\$ 500	\$ 200
		=====	=====
Royalties paid/payable - Note 13F(2)		\$ 300	\$ 187
		=====	=====

C. For commitments and contingencies relating to Fab 2 Wafer Partners and Equity Investors agreements - see Note 13A.

NOTE 20 - MATERIAL DIFFERENCES BETWEEN ISRAEL AND U.S. GAAP

With regard to the Company's financial statements, the material differences between GAAP in Israel and in the U.S. relate to the following. See F below for the presentation of the Company's balance sheets as of December 31, 2002 and 2001 in accordance with U.S. GAAP.

A. PRESENTATION OF CASH AND SHORT-TERM AND LONG-TERM INTEREST-BEARING DEPOSITS DESIGNATED FOR INVESTMENTS RELATING TO FAB 2

In accordance with U.S. GAAP, cash, short-term and long-term interest-bearing deposits designated for investments relating to Fab 2 should be excluded from current assets and long-term investments and presented separately as a non-current asset. Accordingly, as of December 31, 2002, \$51,338 and \$11,893 were reclassified, respectively, from current assets and long-term investments to a long-term asset. As of December 31, 2001 an amount of \$3,548 was reclassified from current assets to a non-current asset.

B. PRESENTATION OF NET LONG-TERM LIABILITIES IN RESPECT OF EMPLOYEES

Under U.S. GAAP, assets and liabilities relating to severance arrangements are to be presented separately and are not to be offset, while according to Israeli GAAP such an offset is required. Accordingly, an amount of \$12,368 and \$10,334 as of December 31, 2002 and 2001, respectively, was reclassified from other long-term liabilities to long-term investments.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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NOTE 20 - MATERIAL DIFFERENCES BETWEEN ISRAEL AND U.S. GAAP (cont.)

C. HEDGING ACTIVITIES IN ACCORDANCE WITH U.S. GAAP (SFAS 133)

- (1) In 2001, the Company adopted SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities" and the related statements and interpretations thereon (collectively, "SFAS 133"). A derivative is typically defined as an instrument whose value is derived from an underlying instrument, index or rate, has a notional amount, requires no or little initial investment and can be net settled.

SFAS 133 requires that all derivatives be recorded in the financial statements at their fair value at the date of the financial statements. The changes in the fair value of the derivatives are charged to the statement of operations or to other comprehensive income, as appropriate in the circumstances. The Company's derivatives consist mainly of foreign currency forward transactions and options and interest rate instruments (collars).

Prior to the adoption of SFAS 133, the Company accounted for hedging activities for U.S. GAAP purposes according to the policy described in Notes 2M and 18A. Based on the hedging activities the Company had prior to January 1, 2001, the financial statements of the Company were not materially affected by the initial adoption of SFAS 133.

- (2) The Company uses foreign exchange agreements (forward contracts and options) to hedge its foreign currency exposure in anticipated equipment purchases denominated in foreign currency. All foreign exchange agreements are with underlying terms that match or approximate the hedged transactions and thus are highly effective. The Company measures the effectiveness of the forward contracts hedges based on forward rates. The Company assesses and measures the effectiveness of the options hedge, at inception and throughout the hedge, based on total changes in cash flows. All changes in fair value are reported in other comprehensive income. The amounts accumulated in other comprehensive income are reclassified to results of operations concurrent with the recognition of depreciation on the equipment. For outstanding foreign exchange agreements as of December 31, 2002 and 2001, see Note 18C(1).

The Company uses interest rate collars with a knock-out feature to hedge its Libor-based variable long-term debt cash flow exposure. The knock-out feature was set above the cap level. The Company determined that the probability that the cap will be knocked-out is remote and thus expected that the hedge will be highly effective. The Company assessed and measured the effectiveness of the hedge, at inception and throughout the hedge, based on total changes in cash flows of the collar, and reported all changes in fair value in other comprehensive income. Amounts presented in other comprehensive income are reclassified to operations or capitalized to property and equipment, as applicable (see Note 2G), as interest payment become due. For outstanding contracts as of December 31, 2002 and 2001, see Note 18C(2).

Capitalized costs with regard to all these hedging activities to be expensed in 2003 are immaterial, since they are connected with the establishment and equipping of Fab 2, the operation of which is expected to commence in 2003.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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NOTE 20 - MATERIAL DIFFERENCES BETWEEN ISRAEL AND U.S. GAAP (cont.)

C. HEDGING ACTIVITIES IN ACCORDANCE WITH U.S. GAAP (SFAS 133) (cont.)

(3) Complying with SFAS 133 and SFAS 138 and the related interpretations thereon with respect to the Company's hedging transactions as of December 31, 2002 would have resulted in: an increase in the Company's current liabilities in the amount of \$128; an increase in other long-term liabilities in the amount of \$11,952; an increase in other comprehensive loss for the year ended December 31, 2002 of \$9,638 and in the accumulated other comprehensive loss component of equity as of such date in the amount of \$17,837; and in a decrease of \$5,727 in property and equipment, net as of December 31, 2002.

D. IMPLEMENTATION OF SFAS 123 AND SFAS 148

Had compensation cost for the Company's share option plans been determined based on fair value at the grant dates for awards made in 2002, 2001 and 2000 in accordance with SFAS 123, as amended by SFAS 148, the Company's pro forma loss and loss per share would have been as follows (for further information with regard to the Company's share option plans and the assumptions for utilizing the Black-Scholes pricing model, see Note 14B(4)):

	2002	Year ended December 31,	
	-----	-----	-----
	2002	2001	2000
	----	----	----
PRO FORMA LOSS			
Loss for the year, as reported	\$ (51,402)	\$ (38,522)	\$ (3,989)
Less - stock-based compensation determined under APB-25	142	283	1,691
	-----	-----	-----
Add - stock-based compensation determined under SFAS 123	(7,476)	(6,209)	(3,207)
	-----	-----	-----
Pro forma loss	\$ (58,736)	\$ (44,448)	\$ (5,505)
	=====	=====	=====
PRO FORMA BASIC LOSS PER SHARE			
As reported	\$ (1.63)	\$ (1.92)	\$ (0.26)
	=====	=====	=====
Pro forma	\$ (1.87)	\$ (2.27)	\$ (0.59)
	=====	=====	=====

E. SALE OF SECURITIES

Under Accounting Principles Board Opinion No. 14 ("APB 14"), the proceeds from the sale of the securities described in Notes 11 and 14E are to be allocated to each of the securities issued based on their relative fair value, while according to Israeli GAAP such treatment is not required. Complying with APB 14, based on the average market value of each of the securities issued in the first three days following their issuance, would have resulted in an increase in shareholders' equity in the amount of \$2,363 (net of \$196 related issuance expenses), and a decrease in convertible debentures in the amount of \$2,559. The effect of amortization of the discount on the convertible debentures under U.S. GAAP for the year ended December 31, 2002 would have been immaterial.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except share data and per share data)

NOTE 20 - MATERIAL DIFFERENCES BETWEEN ISRAEL AND U.S. GAAP (cont.)

F. BALANCE SHEETS IN ACCORDANCE WITH U.S. GAAP

Following are the condensed consolidated balance sheets in accordance with U.S. GAAP:

	As of December 31,	
	2002	2001
	----	----
Current assets	\$ 58,743	\$ 63,872
Long-term investments	18,368	16,334
Property and equipment, net	487,347	336,160
Other assets	95,017	57,910
Cash and short-term and long-term interest-bearing deposits designated for investments relating to Fab 2	63,231	3,548
	-----	-----
Total assets	722,706	477,824
Current liabilities	88,282	87,360
Long-term debt	253,000	115,000
Convertible debentures	21,562	--
Long-term liability in respect of customers' advances	47,246	17,910
Other long-term liabilities	29,726	12,918
Shareholders' equity (*)	282,890	244,636
	-----	-----
Total liabilities and shareholders' equity	\$722,706	\$477,824

(*) The balance as of December 31, 2002 includes accumulated other comprehensive loss of \$17,837 and net proceeds on account of options (Series 1) in the amount of \$2,363 (see also E above); as of December 31, 2001 - accumulated other comprehensive loss of \$8,199.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
 (dollars in thousands, except share data and per share data)

NOTE 20 - MATERIAL DIFFERENCES BETWEEN ISRAEL AND U.S. GAAP (cont.)

G. STATEMENTS OF OPERATIONS IN ACCORDANCE WITH U.S. GAAP

Complying with SFAS 133 and SFAS 138 would not have affected the results of operations for the years ended December 31, 2002 and 2000. The effect on the results of operations for the years ended December 31, 2001 as a result of complying with SFAS 133 and SFAS 138 would be additional financing income (and a reduction of the loss) in the amount of \$30. Accordingly, the Company's loss for the years ended December 31, 2001 would have been \$38,492.

H. COMPREHENSIVE INCOME IN ACCORDANCE WITH U.S. GAAP (SFAS 130)

Comprehensive income (loss) represents the change in shareholder's equity during a reporting period from transactions and other events and circumstances from non-owner sources. It includes all changes in equity during a reporting period except those resulting from investments by owners and distributions to owners. Other comprehensive income (loss) represents gains and losses that under U.S. GAAP are included in comprehensive income but excluded from net income. Following are statements of comprehensive loss in accordance with U.S. GAAP:

	Year ended December 31,		
	2002	2001	2000
	----	----	----
Loss for the year according to U.S. GAAP	\$ (51,402)	\$(38,492)	\$ (3,989)
Other comprehensive loss:			
Unrealized gain on securities arising during the year	--	--	12,563
Realized gain on securities arising during the year	--	(9,550)	--
Adjustment of unrealized gain on securities arising during previous year	--	(3,013)	--
Unrealized losses on derivatives	(9,638)	(8,199)	--
Net comprehensive income (loss) for the year	\$ (61,040)	\$ (59,254)	\$ 8,574
	=====	=====	=====

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(dollars in thousands, except share data and per share data)

NOTE 20 - MATERIAL DIFFERENCES BETWEEN ISRAEL AND U.S. GAAP (cont.)

I. LOSS PER SHARE DATA IN ACCORDANCE WITH U.S. GAAP (SFAS 128)

In accordance with U.S. GAAP (SFAS 128, including the implementation of SFAS 133 and SFAS 138 as described above), the basic and diluted loss per share would be:

	Year ended December 31,		
	2002	2001	2000
Basic loss per share	\$ (1.63) =====	\$ (1.95) =====	\$ (0.33) =====
Diluted loss per share	\$ (1.63) =====	\$ (1.95) =====	\$ (0.33) =====

The following tables provide a reconciliation of the numerators and denominators of the basic and diluted per share computations for 2002, 2001 and 2000 in accordance with U.S. GAAP. The loss per share for each year presented according to U.S. GAAP may differ from the corresponding amount under Israeli GAAP due to different methods for determining the weighted average number of ordinary shares outstanding and the loss used to compute loss per share. According to Israeli GAAP, the weighted average number of ordinary shares outstanding for each period presented include retroactive effect for the beginning of each period of shares issued upon exercise of share options and upon conversion into shares of convertible debentures during such period, and give effect to shares issuable from options whose exercise is probable and to shares issuable from convertible debentures whose conversion is probable based on specific calculations. According to U.S. GAAP, the amount of shares underlying the options and convertible debentures is accounted for according to the treasury method, regardless of the probability of the exercise of the options or the conversion into shares of the convertible debentures. According to Israeli GAAP, the loss to compute loss per share may include imputed interest income on the exercise price of options exercised during the year and of in-the-money options and convertible debentures, an inclusion which is not required by U.S. GAAP.

RECONCILIATION FOR 2002:

	Year ended December 31, 2002		
	Loss	Shares	Per-share
BASIC LOSS PER SHARE	(Numerator)	(in thousands) (Denominator)	Amount
	-----	-----	-----
Loss available to ordinary shareholders	\$ (51,402)	31,523	\$ (1.63) =====
EFFECT OF DILUTIVE SECURITIES			
Convertible debentures	--	--	
Options	--	--	
	-----	-----	
DILUTED LOSS PER SHARE			
Loss available to ordinary shareholders after assumed conversions	\$ (51,402) =====	31,523 =====	\$ (1.63) =====

Options to purchase 10,053,578 Ordinary Shares at an average exercise price of \$9.12 per share were outstanding during 2002 but were not included in the computation of diluted loss per share because their effect was anti-dilutive. The options, which as of December 31, 2002 expire between April 2005 and December 2012 (weighted average remaining contractual life of 4.9 years), were still outstanding as of such date. Convertible debentures, convertible into 2,697,068 Ordinary Shares, were outstanding during 2002 but were not included in the computation of diluted loss per share since their effect is anti-dilutive. The convertible debentures may be converted until December 31, 2008 into Ordinary Shares.

TOWER SEMICONDUCTOR LTD. AND SUBSIDIARY
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
 (dollars in thousands, except share data and per share data)

NOTE 20 - MATERIAL DIFFERENCES BETWEEN ISRAEL AND U.S. GAAP (cont.)

I. LOSS PER SHARE DATA IN ACCORDANCE WITH U.S. GAAP (SFAS 128) (cont.)

RECONCILIATION FOR 2001:

	Year ended December 31, 2001		
	Loss	Shares	Per-share
	(Numerator)	(in thousands) (Denominator)	Amount
	-----	-----	-----
BASIC LOSS PER SHARE			
Loss available to ordinary shareholders	\$ (38,492)	19,724	\$ (1.95)
			=====
EFFECT OF DILUTIVE SECURITIES			
Options	--	--	
	-----	-----	
DILUTED LOSS PER SHARE			
Loss available to ordinary shareholders after assumed conversions	\$ (38,492)	19,724	\$ (1.95)
	=====	=====	=====

Options to purchase 4,117,770 Ordinary Shares at an average exercise price of \$11.39 per share were outstanding during 2001 but were not included in the computation of diluted loss per share because their effect was anti-dilutive. The options, which as of December 31, 2001 expire between April 2005 and December 2011 (weighted average remaining contractual life of 6.84 years), were still outstanding as of such date.

RECONCILIATION FOR 2000:

	Year ended December 31, 2000		
	Loss	Shares	Per-share
	(Numerator)	(in thousands) (Denominator)	Amount
	-----	-----	-----
BASIC LOSS PER SHARE			
Loss available to ordinary shareholders	\$ (3,989)	12,186	\$ (0.33)
EFFECT OF DILUTIVE SECURITIES			
Options	--	--	
	-----	-----	
DILUTED LOSS PER SHARE			
Loss available to ordinary shareholders after assumed conversions	\$ (3,989)	12,186	\$ (0.33)
	=====	=====	=====

Options to purchase 2,376,543 Ordinary Shares at an average exercise price of \$13.34 per share were outstanding during 2000 but were not included in the computation of diluted loss per share because their effect was anti-dilutive. The options, which as of December 31, 2000 expire between October 2003 and December 2010 (weighted average remaining contractual life of 8.52 years), were still outstanding as of such date.

APRIL 29, 2002

TO: Bank Hapoalim B.M. Bank Leumi Le-Israel B.M.

Dear Sirs,

Re: FACILITY AGREEMENT DATED JANUARY 18, 2001 BETWEEN BANK HAPOALIM B.M. AND BANK LEUMI LE-ISRAEL B.M., ON THE ONE HAND AND TOWER SEMICONDUCTOR LTD., ON THE OTHER HAND, AS AMENDED BY A LETTER DATED JANUARY 29, 2001, BY A SECOND AMENDMENT DATED JANUARY 10, 2002 AND BY A LETTER DATED MARCH 7, 2002 (THE FACILITY AGREEMENT, AS AMENDED AS AFORESAID, "THE FACILITY AGREEMENT")

- 1.1. Terms defined in the Facility Agreement shall have the same meanings when used in this letter.
- 1.2. References herein to clauses and schedules, are to clauses and schedules of the Facility Agreement.
- 1.3. References herein to paragraphs, are to paragraphs of this letter.
- 1.4. For the purposes of this letter: (i) "PERMITTED SOURCES" shall mean any of the sources detailed in paragraphs (a)-(d) of clause 16.27.2; and (ii) "SCHEDULE 4.6 AMOUNTS" shall mean amounts of Paid-in Equity invested in the Borrower or of wafer prepayments under Qualifying Wafer Prepayment Contracts received by the Borrower, in each case, in accordance with the undertakings referred to in clauses 4.6 and 16.27.1 of the Facility Agreement, from the entities referred to in clause 4.6 and otherwise in accordance with Schedule 4.6 and clause 16.27.1 of the Facility Agreement.

2. We hereby confirm that at our request the following amendments shall be made to the Facility Agreement:

- 2.1. in clause 16.27.2: (i) the date "March 31, 2002" shall be deleted and replaced by "April 30, 2002"; and (ii) the date "May 31, 2002" shall be deleted and replaced by "June 30, 2002";
- 2.2. for the purposes of clause 16.27.2, with respect only to the aggregate amounts to be invested in the Borrower or received by the Borrower from Permitted Sources by not later than April 30, 2002 (I.E., the aggregate amount of US \$60,000,000 (sixty million United States Dollars)) and June 30, 2002 (I.E., the aggregate amount of US \$80,000,000 (eighty million United States Dollars)), respectively, Schedule 4.6 Amounts invested in or received by the Borrower in respect of the Third Milestone prior to April 30, 2002 or June 30, 2002 (including, for the removal of doubt, prepayments (by way of receipt of credits) under Qualifying Wafer Prepayment Contracts, all subject to the terms and conditions contained in clauses 4.6 and 16.27.1)), as the case may be (in an amount not exceeding, in aggregate, US \$40,000,000 (forty million United States Dollars)), shall be taken into account as if received from Permitted Sources; provided that, notwithstanding anything to the contrary herein:

1

2.2.1. the Borrower shall procure that it shall have received by not later than July 31, 2002 from Permitted Sources (for the removal of doubt, not including any Schedule 4.6 Amounts) an aggregate amount of at least US \$80,000,000 (eighty million United States Dollars), it being recorded that, in accordance with the certificates of the Auditors (copies of such certificates being attached hereto as ANNEX A), the Borrower has received US \$41,223,181 (forty-one million, two hundred and twenty-three thousand, one hundred and eighty-one United States Dollars) from Permitted Sources prior to the date hereof; and

2.2.2. without derogating from clauses 16.27.1(a) and (b), the Borrower shall procure that it shall have received by not later than July 31, 2002 Schedule 4.6 Amounts in respect of the Third Milestone in an aggregate amount of at least US \$44,000,000 (forty-four million United States Dollars).

For the removal of doubt, the provisions of this paragraph 2.2 permitting Schedule 4.6 Amounts to be taken into account for the purposes of determining compliance by the Borrower with the provisions clause 16.27.2 of the Facility Agreement shall apply only in respect of the amounts to be invested or received by the Borrower from Permitted Sources prior to June 30, 2002 and not to any other amounts to be invested pursuant to clause 16.27.2; and

- 2.3. in clause 1.1.118(e): the date "March 31, 2002" after the words "by not later than" shall be deleted and replaced by "April 30, 2002".
3. We agree that notwithstanding anything to the contrary in the Facility Agreement, the Borrower shall not be entitled to obtain any Advances and Loans during the period from the date of signature of this letter and until the Borrower shall have complied with the provisions of clause 16.27.2 with respect to aggregate amounts to be invested or

received from Permitted Sources by not later than April 30, 2002.

4. Subject to compliance by the Borrower with all the provisions of the Facility Agreement relating to the making available of Advances and Loans (including pursuant to clauses 5.1 5.2 and 16.27.2 of the Facility Agreement, as amended by this letter) and provided that the Total Outstandings in respect of Advances and Loans only (including, for the removal of doubt, in respect of Advances and Loans made prior to such period) shall at no time exceed the limits prescribed under the Facility Agreement, the Borrower shall be entitled to obtain further Advances; provided further that, notwithstanding anything to the contrary in the Facility Agreement (including Schedule 1.1.104), the Total Outstandings in respect of Advances and Loans only (including, for the removal of doubt, in respect of Advances and Loans made prior to such period) shall at no time during any of the periods set out in column A below, exceed the maximum amount set out in column B opposite such period below:

COLUMN A (PERIOD)	COLUMN B (MAXIMUM TOTAL OUTSTANDINGS- LOANS AND ADVANCES)
1.Until compliance by the Borrower with clause 16.27.2 investments required to be made by not later than April 30, 2002 (US \$60,000,000 in aggregate*)	US \$162,000,000
2.After compliance with clause 16.27.2 investments required to be made by not later than April 30, 2002 but before compliance with clause 16.27.2 investments required to be made by not later than June 30, 2002 (US \$80,000,000 in aggregate*)	US \$244,000,000
3.After compliance with clause 16.27.2 investments required to be made by not later than June 30, 2002 but before compliance with clauses 16.27.1 and 16.27.2 investments required to be made by not later than July 31, 2002 (US \$80,000,000 from Permitted Sources* and US \$44,000,000 of Schedule 4.6 Amounts in respect of the Third Milestone))	US \$244,000,000
4.After compliance with all investment requirements referred to in items 1-3 above, but before September 30, 2002	US \$265,000,000
5.After compliance with all investment requirements referred to in items 1-3 above, during the period October 1, 2002-December 31, 2002	US \$333,000,000

* It being recorded that, in accordance with the certificates supplied by the Auditors (Annex A hereto), the Borrower has received US \$41,223,181 from Permitted Sources prior to the date hereof.

5. The Facility Agreement is hereby amended as expressly set out in this letter above. This letter shall be read together with the Facility Agreement as one agreement and save for the amendments expressly set out in this letter above, the terms and conditions of the Facility Agreement shall remain unchanged and in full force and effect.

6. Please confirm your agreement to the above by signing in the place indicated therefor below.

Yours sincerely,

TOWER SEMICONDUCTOR LTD.

We hereby confirm our agreement to the above.

for BANK HAPOALIM B.M.

for BANK LEUMI LE-ISRAEL B.M.

By: _____

By: _____

Title: _____

Title: _____

September __, 2002

TO: Bank Hapoalim B.M.

Bank Leumi Le-Israel B.M.

Dear Sirs,

Re: FACILITY AGREEMENT DATED JANUARY 18, 2001 BETWEEN BANK HAPOALIM B.M. AND BANK LEUMI LE-ISRAEL B.M., ON THE ONE HAND AND TOWER SEMICONDUCTOR LTD., ON THE OTHER HAND, AS AMENDED BY A LETTER DATED JANUARY 29, 2001, BY A SECOND AMENDMENT DATED JANUARY 10, 2002, BY A LETTER DATED MARCH 7, 2002 AND BY A LETTER DATED APRIL 29, 2002 (THE FACILITY AGREEMENT, AS AMENDED AS AFORESAID, "THE FACILITY AGREEMENT")

- 1.1. Terms defined in the Facility Agreement shall have the same meanings when used in this letter.
- 1.2. References herein to clauses and schedules, are to clauses and schedules of the Facility Agreement.
- 1.3. References herein to paragraphs, are to paragraphs of this letter.
- 1.4. For the purposes of this letter: (i) "PERMITTED SOURCES" shall mean any of the sources detailed in paragraphs (a)-(e) of clause 16.27.2, as amended pursuant to paragraph 2.4 below; and (ii) "SCHEDULE 4.6 AMOUNTS" shall mean amounts of Paid-in Equity invested in the Borrower or of wafer prepayments under Qualifying Wafer Prepayment Contracts received by the Borrower, in each case, in accordance with the undertakings referred to in clauses 4.6 and 16.27.1 of the Facility Agreement, from the entities referred to in clause 4.6 and otherwise in accordance with Schedule 4.6 and clause 16.27.1 of the Facility Agreement.
2. We hereby confirm that at our request the following amendments shall be made to the Facility Agreement:
 - 2.1. The following new clauses 1.1.103A, 1.1.103B and 1.1.103C, shall be inserted after clause 1.1.103:

1

- "1.1.103A `MEI' - means Matsushita Electric Industrial Co. Ltd., a company traded in Japan on the 1st Section of the Tokyo Exchange Stock Market;
- 1.1.103B `MEI AGREEMENT' - means the Joint Development and Cross-Licence Agreement between the Borrower and MEI dated May 28, 2002;
- 1.1.103C `MEI PROCEEDS' - means unconditional, non-refundable payments (net of Taxes, including withholding Taxes) actually received by the Borrower from MEI under the MEI Agreement in respect of the development of technology under the MEI Agreement;"
- 2.2. In clause 5.1.1(ii), in the 18th line, after the words "wafer prepayments (including credits);" there shall be inserted the following:
- "; MEI Proceeds (other than any MEI Proceeds constituting wafer prepayments and which are taken into account as such under this clause 5.1.1(ii) above)"
- 2.3. In clause 16.1.1(v)(d), the words ", as well as the amounts received in such Quarter by way of MEI Proceeds", shall be inserted at the end thereof after the words "Wafer Prepayments" and Schedule 16.1.1(v)B, shall be amended by: (i) inserting in the last sentence, prior to the words "and the Wafer Prepayments", the following: ", the amounts received by way of MEI Proceeds amounted to US \$_____ (_____ United States Dollars)"; and (ii) inserting in the second sentence prior to the words "and the cumulative amount of the Wafer Prepayments...", the following: ", the cumulative amount received by way of MEI Proceeds amounted to US \$_____ (_____ United States Dollars)".

2

2.4. Clause 16.27.2 shall be amended to read as follows:

"16.27.2 procure that there shall have been: (a) invested in the Paid-in Equity of the Borrower, by way of private placement or public offering (including exercise of employee share options or any other warrants issued by the Borrower); and/or (b) received by the Borrower proceeds, net of taxes paid and related expenses, generated from the sale of shares of the Borrower in Saifun, Azalea Microelectronics Corporation, Chip Express Corporation and/or Virage Logic Corporation; provided that, the Borrower shall have undertaken in writing to the Banks to capitalise the amount of such proceeds, which comprises a net capital gain, into Paid-in Equity by way of share issue, by no later than September 30, 2003 (to the extent necessary to satisfy the Borrower's obligations on such date pursuant to the last sentence of this clause 16.27.2) and that such capital gains are recognised as additional paid-up share capital by the Investment Centre in accordance with the terms of the Investment Centre Fab 2 Grants (to the extent necessary to satisfy the Borrower's obligations pursuant to the last sentence of this clause 16.27.2) (such net capital gains, when duly capitalised and recognised as aforesaid, hereinafter 'THE RECOGNISED INVESTMENTS'); and/or (c) the Borrower shall have received wafer prepayments (including credits) under Qualifying Wafer Prepayment Contracts; and/or (d) received by the Borrower an amount (net of discounts, but not net of commissions, fees and other issuance costs), in respect of the principal amount of Equity Convertible Debentures (subject to the terms of clause 1.1.118 above); and/or (e) the Borrower shall have received MEI Proceeds (excluding any MEI Proceeds comprising wafer prepayments under Qualifying Wafer Prepayment Contracts which are taken into account under (c) above);

all the above in an aggregate amount of not less than US \$144,000,000 (one hundred and forty-four million United States Dollars) to be invested and/or received as aforesaid, as to US \$40,000,000 (forty million United States Dollars) (out of which US \$40,000,000 (forty million United States Dollars) at least US \$20,000,000 (twenty million United States Dollars) shall have been invested or received from the sources detailed in paragraphs (a) (excluding investments received from Etgar) and (d) above only), by not later than January 31, 2002, as to US \$60,000,000 (sixty million United States Dollars) by not later than April 30, 2002, as to US \$80,000,000 (eighty million United States Dollars) by not later than September 30, 2002, as to US \$110,000,000 (one hundred and ten million United States Dollars), by not later than December 31, 2002 and as to the full amount of US \$144,000,000 (one hundred and forty-four million United States Dollars), by not later than December 31, 2003 (such amount of US \$144,000,000 (one hundred and forty-four million) being in addition to the investment of US \$309,990,000 (three hundred and nine million, nine hundred and ninety thousand United States Dollars) to be invested in accordance with clauses 4.5 and 4.6 above (for the purposes of the foregoing, in the event that the Borrower shall provide to the Banks a binding commitment by Etgar to invest in the Borrower's Paid-in Equity in an amount of US \$2,200,000 (two million two hundred thousand United States Dollars), which such investments are, pursuant to such commitment, to be made in accordance with the timetable set out in Schedule 4.6 (pro rata and PARI PASSU with the investments by TIC in accordance with TIC's undertakings as referred to in clause 4.6 above), then, for so long as such investments are made in accordance with such schedule as aforesaid, the aggregate amount of US \$2,200,000 (two million two hundred thousand United States Dollars) as aforesaid shall be deemed to have been received on January 31, 2002 and shall comprise Paid-in Equity for all purposes herein);

provided that, notwithstanding anything to the contrary in this Agreement, the aggregate investments in Paid-in Equity as referred to in clauses 4.5 and 4.6 above, the investments in Paid-in Equity as described above in paragraph (a), the proceeds referred to in paragraph (b) above in respect of which the Borrower shall have given an undertaking with respect to net capital gains as aforesaid, the Equity Convertible Debentures and the MEI Proceeds (excluding any MEI Proceeds comprising wafer prepayments under Qualifying Wafer Prepayment Contracts) shall not be less than US \$369,000,000 (three hundred and sixty-nine million United States Dollars) (out of the total investment of US \$454,000,000 (four hundred and fifty-four million United States Dollars)) and the Equity Convertible Debentures shall, for the removal of doubt, not exceed US \$60,000,000 (sixty million United States Dollars). Accordingly, in the event that at any date for receipt of an investment under Schedule 4.6 it becomes apparent that the amount received by the Borrower in respect of wafer prepayments (including credits) under Qualifying Wafer Prepayment Contracts (it being recorded that all amounts of MEI Proceeds in excess of US \$8,000,000 (eight million United States Dollars) in aggregate shall, for this purpose, be deemed to constitute wafer prepayments under Qualifying Wafer Prepayment Contracts as aforesaid) is in excess of US \$85,000,000 (eighty-five million United States Dollars), the Borrower shall, within 4 1/2 (four and-a-half) months of the SDPP, procure that there shall have been invested in the Borrower in Paid-in Equity an amount equal to the excess of such wafer prepayments over US \$85,000,000 (eighty-five million United States Dollars) as aforesaid (in addition to all other Paid-in Equity to be invested pursuant to this Agreement).

The Borrower shall within 7 (seven) days of receipt of each investment, proceeds from the sale of shares, wafer prepayment, payment on account of Equity Convertible Debentures or MEI Proceeds, submit to the Banks a confirmation by the Auditors of each investment in Paid-in Equity, proceeds and net capital gains referred to in paragraph (b) above, wafer payment or payment on account of Equity Convertible Debentures or MEI Proceeds referred to in this clause 16.27.2 above, together, with respect to net capital gains as referred to in paragraph (b) above, with the undertaking by the Borrower to capitalise same as aforesaid. In addition, by no later than September 30, 2003, the aggregate investments in Paid-in Equity as referred to in clauses 4.5 and 4.6 above and as described above in paragraph (a) above and the Recognised Investments of the Borrower under Schedule 4.6 shall not be less than US \$345,000,000 (three hundred and forty-five million United States Dollars);"

- 2.5. For the purposes of clause 16.27.2 (as amended pursuant to paragraph 2.4 above), notwithstanding anything to the contrary in the Facility Agreement (including in any amendments thereto):

2.5.1. in the event that the Borrower shall fail to comply with its obligations pursuant to clause 16.27.2 to procure that it shall have received by not later than September 30, 2002 from Permitted Sources an aggregate amount of at least US \$80,000,000 (eighty million United States Dollars), it being recorded that, in accordance with the certificates of the Auditors (copies of such certificates being attached hereto as ANNEX A), the Borrower has received US \$41,223,181 (forty-one million, two hundred and twenty-three thousand, one hundred and eighty-one United States Dollars) from Permitted Sources prior to the date hereof, but shall have received, by not later than September 30, 2002, an aggregate amount from Permitted Sources which equals at least US \$76,000,000 (seventy-six million United States Dollars), including MEI Proceeds of at least US \$4,950,000 (four million, nine hundred and fifty thousand United States Dollars), then, for the purposes only of clause 16.27.2, subject to the Borrower not having received notice or otherwise having reason to believe that MEI will not fulfill all terms of the MEI Agreement, the Borrower shall be deemed to have complied with its obligations under clause 16.27.2 which are required to be complied with by September 30, 2002; provided that, in the event of the operation of such deeming provision as aforesaid, then, without derogating from the Borrower's other obligations under clause 16.27, the Borrower shall be required to procure that it shall receive, by no later than December 31, 2002, from Permitted Sources, an amount equal at least to the difference between US \$80,000,000 (eighty million United States Dollars) and the aggregate amount from Permitted Sources received by it as of September 30, 2002, such difference to be in addition to all other amounts from Permitted Sources which the Borrower is required, under the Facility Agreement, to receive by not later than December 31, 2002. For the removal of doubt, the deeming provision referred to above (if relevant) shall apply only to determine compliance by the Borrower with those obligations of the Borrower under clause 16.27.2 which must be fulfilled by September 30, 2002, and shall not be relevant for any other purpose under the Facility Agreement.

- 2.5.2. without derogating from clauses 16.27.1(a) and (b), the Borrower confirms and represents that, in accordance with the certificate of the Auditors (a copy of such certificate being attached hereto as ANNEX B), the Borrower has received, prior to July 31, 2002, Schedule 4.6 Amounts in respect of the Third Milestone in an aggregate amount of at least US \$44,000,000 (forty-four million United States Dollars); and
- 2.5.3. all MEI Proceeds in excess of an aggregate amount of US \$8,000,000 (eight million United States Dollars) shall be deemed as credits and/or wafer prepayments from Qualifying Wafer Prepayment Contracts in terms of the Facility Agreement.
- 2.5.4. for the removal of doubt, Schedule 4.6 Amounts do not constitute Permitted Sources and shall not be taken into account for purposes of clause 16.27.2 (other than as was specifically permitted under the terms of the amendment to the Facility Agreement, dated April 29, 2002, and for that purpose only).

3. We agree that notwithstanding anything to the contrary in the Facility Agreement, the Borrower shall not be entitled to obtain any Advances and Loans during the period from the date of signature of this letter and until the Borrower shall have received from Permitted Sources (other than the Schedule 4.6 Amounts) all of the amounts required by September 30, 2002 pursuant to paragraph 2.5.1 above. Accordingly (for the removal of doubt, with respect to further Advances and Loans, subject to compliance by the Borrower with all the provisions of the Facility Agreement relating to the making available of Advances and Loans (including pursuant to clauses 5.1, 5.2 and 16.27.2 of the Facility Agreement, as amended by this letter) and provided that the Total Outstandings in respect of Advances and Loans only (including, for the removal of doubt, in respect of Advances and Loans made prior to such period) shall at no time exceed the limits prescribed under the Facility Agreement), notwithstanding anything to the contrary in the Facility Agreement (including Schedule 1.1.104), the Total Outstandings in respect of Advances and Loans only (including, for the removal of doubt, in respect of Advances and Loans made prior to such period) shall at no time during any of the periods set out in column A below, exceed the maximum amount set out in column B opposite such period below:

COLUMN A

COLUMN B

(PERIOD)

(MAXIMUM TOTAL OUTSTANDING-
LOANS AND ADVANCES)

1.Until compliance with clause 16.27.1 investments required to be made by not later than July 31, 2002 (US \$44,000,000 of Schedule 4.6 Amounts in respect of the Third Milestone) and compliance with clause 16.27.2 investments required to be made by not later than September 30, 2002	US \$244,000,000
--	------------------

2.After compliance with all investment requirements referred to in item 1 above, but before September 30, 2002	US \$265,000,000
--	------------------

3.After compliance with all investment requirements referred to in item 1 above, during the period October 1, 2002-December 31, 2002	US \$333,000,000
--	------------------

4. The Facility Agreement is hereby amended as expressly set out in this letter above. This letter shall be read together with the Facility Agreement as one agreement and save for the amendments expressly set out in this letter above, the terms and conditions of the Facility Agreement shall remain unchanged and in full force and effect.

5. Please confirm your agreement to the above by signing in the place indicated therefor below.

Yours sincerely,

TOWER SEMICONDUCTOR LTD.

We hereby confirm our agreement to the above.

for BANK HAPOALIM B.M.

for BANK LEUMI LE-ISRAEL B.M.

By: _____

By: _____

Title: _____

Title: _____

TO: BANK HAPOALIM B.M.

BANK LEUMI LE-ISRAEL B.M.

Dear Sirs,

Re: LETTER OF AMENDMENT DATED SEPTEMBER 18, 2002 ("THE AMENDMENT LETTER") AMENDING THE FACILITY AGREEMENT DATED JANUARY 18, 2001 BETWEEN BANK HAPOALIM B.M. AND BANK LEUMI LE-ISRAEL B.M., ON THE ONE HAND AND TOWER SEMICONDUCTOR LTD., ON THE OTHER HAND, AS AMENDED FROM TIME TO TIME

1. We hereby confirm that, at our request, the Amendment Letter shall be amended as follows:
 - 1.1. on page 4 thereof, in line 29, the date "September 30, 2002" shall be deleted and replaced by "October 31, 2002";
 - 1.2. in paragraphs 2.5.1 and 3 thereof (other than the table), the date "September 30, 2002" shall, wherever it appears, be deleted and replaced by "October 31, 2002"; and
 - 1.3. the table on page 10 thereof shall be deleted and replaced by the following table:

COLUMN A ----- (PERIOD) -----	COLUMN B ----- AXIMUM TOTAL OUTSTANDINGS- LOANS AND ADVANCES) -----
1.Until compliance with clause 16.27.1 investments required to be made by not later than July 31, 2002 (US \$44,000,000 of Schedule 4.6 Amounts in respect of the Third Milestone) and compliance with clause 16.27.2 investments required to be made by not later than October 31, 2002	US \$244,000,000
2.After compliance with all investment requirements referred to in item 1 above, but prior to December 31, 2002	US \$333,000,000

2. The Amendment Letter is hereby amended as expressly set out in this letter above. Save for the foregoing, the terms and conditions of the Amendment Letter shall remain unchanged and in full force and effect.
3. Please confirm your agreement to the above by signing in the place indicated therefor below.

Yours sincerely,

TOWER SEMICONDUCTOR LTD.

We hereby confirm our agreement to the above.

for BANK HAPOALIM B.M.

for BANK LEUMI LE-ISRAEL B.M.

By: _____
Title: _____

By: _____
Title: _____

To: Tower Semiconductor Ltd.
P.O. Box 619
Migdal Haemek 23105
Israel
Fax: +972-4-654-7788
Attention: Co-Chief Executive Officer

cc: Yigal Arnon & Co.
One Azrieli Center
Tel-Aviv 67021
Israel
Fax: +972-3-608-7714
Attention: David H. Schapiro, Adv.

Re: AMENDMENT TO PAYMENT SCHEDULE OF SERIES A-3 AND SERIES A-4 ADDITIONAL PURCHASE OBLIGATIONS

Dear Sirs,

With regard to the undersigned's obligation to exercise the Series A-3 and Series A-4 Additional Purchase Obligations, as provided for in its Fab 2 Investment Agreements, all capitalized terms as defined therein, the undersigned hereby agrees that its agreements shall be amended as follows:

1. WAFER PARTNER AND EQUITY PARTNER UNDERTAKING. The undersigned hereby confirms that in accordance with the terms set forth hereunder, it will advance the payment of the entire Series A-3 Additional Purchase Obligation by no later than April 5, 2002 or 2 business days following shareholder approval of this Amendment, without regard to whether the Series A-3 Mandatory Exercise Events occurs, and it will advance the payment of the entire Series A-4 Additional Purchase Obligation by no later than October 1, 2002, without regard to whether the Series A-4 Mandatory Exercise Events occurs.

2. WAFER PARTNER.

In consideration of its undertaking to advance the Series A-3 Additional Purchase Obligation, by no later than April 5, 2002 or 2 business days following shareholder approval of this Amendment without regard to whether the Series A-3 Mandatory Exercise Events occurs, and to advance the Series A-4 Additional Purchase Obligation, by no later than October 1, 2002, without regard to whether the Series A-4 Mandatory Exercise Events occurs, following each payment advance, (i) the undersigned will be issued fully-paid and non-assessable ordinary shares of Tower equivalent to sixty percent of the amount of the payment made in connection with the Series A-3 Additional Purchase Obligation and the Series A-4 Additional Purchase Obligation, divided by the average trading price for the ordinary shares during the 30 consecutive trading days preceding the date of actual payment, provided that such average trading price will not exceed \$12.50, and (ii) the undersigned's Pre-Paid Credit Accounts will be increased by the amount equivalent to forty percent of the amount of the payment made in connection with the Series A-3 Additional Purchase Obligation and the Series A-4 Additional Purchase Obligation, which will be applicable against Fab 2 production purchases as soon as such production commences at Fab 2, provided that until July 1, 2005 such amounts that are added to the Pre-Paid Credit Account may be applied towards only 7.5% of Fab 2 wafer purchases made by the undersigned.

1

3. EQUITY PARTNER.

In consideration of its undertaking to advance the Series A-3 Additional Purchase Obligation, by no later than April 5, 2002 or 2 business days following shareholder approval of this Amendment without regard to whether the Series A-3 Mandatory Exercise Events occurs, and to advance the Series A-4 Additional Purchase Obligation, by no later than October 1, 2002, without regard to whether the Series A-4 Mandatory Exercise Events occurs, following each payment advance, the undersigned will be issued fully-paid and non-assessable ordinary shares of Tower equivalent to the amount of the payment made in connection with the Series A-3 Additional Purchase Obligation and the Series A-4 Additional Purchase Obligation, divided by the average trading price for the ordinary shares during the 30 consecutive trading days preceding the date of actual payment, provided that such average trading price will not exceed \$12.50.

4. APPROVALS. This Amendment is subject to shareholder and third party approvals, as may be applicable.
5. ENTIRE AGREEMENT. All other provisions of the undersigned's Fab 2 Investment Agreements shall remain unchanged.

WAFER OR EQUITY PARTNER

COMPANY: _____

BY: _____
TITLE: _____
DATE: _____

July __, 2002

To: Tower Semiconductor Ltd.
P.O. Box 619
Migdal Haemek 23105
Israel
Attention: Co-Chief Executive Officer

cc: Yigal Arnon & Co.
One Azrieli Center
Tel-Aviv 67021
Israel
Attention: David H. Schapiro, Adv.

RE: PARTICIPATION IN RIGHTS OFFERING

Dear Sirs,

Following our discussions with you, we, the undersigned, wish to congratulate you upon your agreement with Ontario Teachers Pension Plan Board ("OTPP"; the "OTPP Agreement"), which was signed on July 24, 2002, and is intended to facilitate your satisfaction of your immediate financing requirements under the Fab 2 credit facility with your banks.

It is our understanding that the main terms of the OTPP Agreement are as follows:

- o OTPP will make a \$15 million private placement in Tower in consideration for ordinary shares to be issued at a purchase price of \$5.60 per share and 45% warrant coverage exercisable into additional ordinary shares at an exercise price of \$7.50 per share.
- o After the closing of the OTTP Agreement, all of the securities issued to OTTP will be registered for resale on the Form F-3 registration statement. These securities will be subject to a nine month lock-up period.

As we understand that the terms of the Rights Offering are substantially the same as the OTPP Agreement as set forth in the final draft of the prospectus relating to the Rights Offering (the "Prospectus") to be approved by Tower's Board of Directors, we hereby agree, severally and not jointly, to exercise our rights from the Rights Offering such that we will purchase securities equivalent to the following amounts:

- o Israel Corporation Ltd. - \$9.2 million
- o SanDisk Corporation - \$4.0 million
- o Alliance Semiconductor Corporation - \$4.0 million
- o Macronix International Co., Ltd. - \$3.3 million - 4.0 million

We further agree to your disclosure in the Prospectus of the quantity of rights we will exercise from the Rights Offering.

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SANDISK CORPORATION

ALLIANCE SEMICONDUCTOR CORPORATION

By: _____
Title: _____
Date: _____

By: _____
Title: _____
Date: _____

MACRONIX (BVI) CO., LTD.

ISRAEL CORPORATION TECHNOLOGIES (ICTECH) LTD.

By: _____
Title: _____
Date: _____

By: _____
Title: _____
Date: _____

2

To: Tower Semiconductor Ltd.
P.O. Box 619
Migdal Haemek 23105
Israel
Fax: +972-4-654-7788
Attention: Co-Chief Executive Officer

cc: Yigal Arnon & Co.
One Azrieli Center
Tel-Aviv 67021
Israel
Fax: +972-3-608-7714
Attention: David H. Schapiro, Adv.

Re: AMENDMENT TO PAYMENT SCHEDULE OF SERIES A-5 ADDITIONAL PURCHASE
OBLIGATIONS, WAIVER OF SERIES A-5 CONDITIONS, CONVERSION OF SERIES A-4
WAFER CREDITS AND OTHER PROVISIONS (THE "AMENDMENT")

Dear Sirs,

With regard to the obligation of each party to this letter (a "Party") to exercise the Series A-5 Additional Purchase Obligations, as provided for in its Fab 2 Investment Agreements, as amended through the date hereof, all capitalized terms not defined herein shall be as defined therein, each Party hereby agrees that subject to Section 7 of this Amendment, effective upon the receipt by Tower Semiconductor Ltd. (the "Company" or "Tower") of the signatures of each of SanDisk Corporation, Alliance Semiconductor Corporation, Macronix International Co., Ltd. and Israel Corporation Technologies (ICTech) Ltd., its agreements shall be amended as follows:

1. EXERCISE OF SERIES A-5 ADDITIONAL PURCHASE OBLIGATION.

1.1. FIRST INSTALLMENT. Each Party hereby notifies Tower that in accordance with the terms set forth hereunder, and subject to and effective upon Tower obtaining all required approvals as specified in Section 7 hereof, it shall irrevocably exercise sixty percent (60%) of the Series A-5 Additional Purchase Obligation (the "First Installment"), which is the amount identified as the First Installment with respect to such Party as set forth in Exhibit A hereto, without regard to whether the Series A-5 Mandatory Exercise Event occurs or whether any of the conditions to a Mandatory Exercise are satisfied. The First Installment shall be paid no later than five (5) business days following satisfaction of the condition specified in the first sentence above as evidenced by a certificate delivered to each of the parties and executed by Tower's CEO(s) certifying the satisfaction of such condition.

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1.2. SECOND INSTALLMENT. Provided the conditions of Section 1.1 are met, each Party hereby further notifies the Company that in accordance with the terms set forth hereunder, and subject to and conditioned upon the completion of the Minimum Financing (as defined below), it shall irrevocably exercise forty percent (40%) of the Series A-5 Additional Purchase Obligation (the "Second Installment"; the First Installment and the Second Installment shall collectively be referred to as the "Series A-5 APO Installments"), which is the amount identified as the Second Installment with respect to such Party as set forth in Exhibit A hereto, without regard to whether the Series A-5 Mandatory Exercise Event occurs or whether any of the conditions to a Mandatory Exercise are satisfied. The term Minimum Financing shall mean the Raising (as defined below) by the Company of the dollar amount equal to (a) \$22,105,730, provided that if either QuickLogic Corp. or The Challenge Fund-Etgar II, LP (each, a "Non-Participating Party") does not become a party to this Amendment, each of Bank Hapoalim B.M. and Bank Leumi-Le-Israel Limited agree to amend the terms of the Facility Agreement to which Tower is a party (the "Facility Agreement") such that the payment of the Series A-5 Additional Purchase Obligation by such Non-Participating Party shall no longer be required pursuant to the Facility Agreement, or (b) \$22,105,730 plus the dollar amount represented by the Series A-5 Additional Purchase Obligation of a Non-Participating Party. The term Raising shall mean the receipt of proceeds from (i) the sale, in a public or private offering, of ordinary shares of the Company or debt convertible into ordinary shares of the Company; or (ii) any other form of fund raising which satisfies the requirements for additional financing pursuant to section 16.27.2 of the Facility Agreement, as amended, to which the Company is a party. The Second Installment shall be paid upon satisfaction of the condition specified in the first sentence above as evidenced by a certificate delivered to each of the parties and executed by Tower's CEO(s) certifying the satisfaction of such condition; provided, further, that the Second Installment shall not be due before the later of (i) August 1, 2003, and (ii) five (5) business days following the date upon which the Company has completed the Minimum Financing. Notwithstanding the preceding sentence, the obligation to advance the Second Installment shall terminate, and there shall be no further obligation or liability to pay the Second Installment, if the Minimum Financing shall not have been completed by December 31, 2003.

For the avoidance of all doubt and notwithstanding the provisions set forth in Sections 5 and 6 of the Additional Purchase Obligation Agreement between SanDisk Corp. and Tower dated July 4, 2000 or the Additional Purchase Obligation Agreement between Israel Corporation Technologies (ICTech) Ltd. and Tower dated December 12, 2000 or the Additional Purchase Obligation Agreement between The Challenge Fund-Etgar II, LP and Tower dated February 11, 2001 and as incorporated by reference in all of the other Fab 2 Investment Agreements, as applicable to each Party, each Party's undertaking to pay the First Installment and the Second Installment is, upon satisfaction of all of the conditions specified in this Amendment and subject to the last sentence of the first paragraph of this Section 1.2, completely irrevocable.

2. SHARE ISSUANCES. Immediately following the advancement of the First Installment, each Party will be issued fully-paid and non-assessable ordinary shares of Tower equivalent to the aggregate of the First Installment divided by the average trading price for the ordinary shares of the Company during the thirty (30) consecutive trading days preceding the date that this Amendment is approved by the Board of Directors of the Company. Immediately following the advancement of the Second Installment, each Party will be issued fully-paid and non-assessable ordinary shares of Tower equivalent to the Second Installment divided by the price per ordinary share of the Company paid in connection with the Minimum Financing (the "Minimum Financing Price"); provided, however, that if the Minimum Financing Price cannot reasonably be calculated from the documents evidencing the Minimum Financing, then the Minimum Financing Price shall be the average trading price for the ordinary shares of the Company during the thirty (30) consecutive trading days preceding the date the Second Installment is paid.

3. CONVERSION OF PORTION OF PRE-PAID CREDIT ACCOUNT. Tower hereby grants to each Party who is either SanDisk Corp. ("SNDK"), Alliance Semiconductor Corp. ("ALSC"), Macronix International Co., Ltd. ("MXIC") or QuickLogic Corp. ("QUIK") (SNDK, ALSC, MXIC and QUIK shall each be referred to as a "Wafer Partner" and collectively shall be referred as the "Wafer Partners") an option to convert a number of credits equal to the number of credits in each of its respective Pre-Paid Wafer Accounts that were issued in connection with its advancement of the Series A-4 Additional Purchase Obligation payment in October 2002 and that are held in its Pre-Paid Wafer Account on December 31, 2005 (the "Series A-4 Credits") into fully-paid and non-assessable ordinary shares of Tower equivalent to the amount of the Series A-4 Credits divided by the average trading price for the ordinary shares of the Company during the thirty (30) consecutive trading days preceding December 31, 2005 (the "Conversion Price"), PROVIDED that such Party provides Tower advance written notice to convert all or a portion of the Series A-4 Credits no earlier than December 31, 2005 and by no later than January 31, 2006 (the "Conversion Notice"). Tower hereby agrees to issue to each Wafer Partner that provides it with a Conversion Notice the ordinary shares to be issued in connection with its exercise of the Series A-4 Credits promptly after its receipt of such Conversion Notice.

4. RIGHTS OFFERING. To the extent that any of the Wafer Partners shall convert their "Series A-4 Credits" into fully-paid and non-assessable ordinary shares pursuant to paragraph 3, and provided that such amount of converted Series A-4 Credits are equivalent to or greater than an aggregate of 5% of Tower's then outstanding share capital, Tower hereby undertakes to prepare and file a registration statement, within a reasonable time following the issuance of the ordinary shares to the Wafer Partners in connection with their conversion of the Series A-4 Credits, for the distribution of rights to all of Tower's shareholders other than Wafer Partners but including each of the Parties who are either Israel Corporation Technologies (ICTech) Ltd. ("ICTech") or The Challenge Fund-Etgar II, LP ("CF") (ICTech and CF shall each be referred to as an "Equity Partner"), to purchase additional shares in Tower at the Conversion Price to maintain their percentage of ordinary shares held in Tower immediately prior to the conversion of the Series A-4 Credits. Tower shall use its reasonable best efforts to cause the registration statement to be declared effective by the Securities and Exchange Commission and the Israel Securities Authority as soon as reasonably practicable after filing thereof with the Securities and Exchange Commission and the Israel Securities Authority.

5. TERMINATION OF WAFER PARTNER DIFFERENTIAL CONDITION. Upon satisfaction of the condition set forth in the first sentence of Section 1.1, the parties shall irrevocably agree to fully and indefinitely waive Tower's obligation to raise an additional \$50 million from additional wafer partners in connection with the provisions set forth in the Fab 2 Investment Agreements and related letters with respect to the Wafer Partner Differential.
6. RESTRICTION ON TRANSFER OF EQUITY SECURITIES UNDER THE CONSOLIDATED SHAREHOLDERS AGREEMENT; REGISTRATION RIGHTS. All of the parties to the Consolidated Shareholders Agreement dated January 18, 2001 by and between SanDisk, Alliance, Macronix and Israel Corporation Ltd. (the "CSA"), hereby agree that all of the ordinary shares in Tower to be issued to such parties with respect to the Series A-5 Additional Purchase Obligations will be subject to the restrictions on transfer of Equity Securities during the Initial Restricted Period and the Subsequent Restricted Period (all capitalized terms in this section as defined in the CSA). All shares issued or contemplated to be issued to the parties pursuant to Sections 2 and 3 of this Amendment shall be deemed to be Purchaser Group Registrable Securities as defined in and as provided for in the Registration Rights Agreement made as of January 18, 2001, by and among Tower Semiconductor Ltd., SanDisk Corporation, Alliance Semiconductor Corp., Macronix International Co., Ltd, QuickLogic Corporation and The Israel Corporation Ltd.
7. APPROVALS. This Amendment and the parties obligations hereunder are subject to and shall only become effective upon the approval of the Company's audit committee, its board of directors (which approval shall include the unanimous vote of approval of its independent directors), its shareholders, the Office of the Chief Scientist, the Investment Center and, to the extent applicable, the Israel Land Administration. In addition, this Amendment and the parties obligations hereunder is subject to and shall only become effective upon the Company receiving the consent of each of Bank Hapoalim B.M. and Bank Leumi-Le-Israel Limited to amend the terms of the Facility Agreement to (a) postpone the date for Tower to next raise an aggregate of \$26 million pursuant to section 16.27.2 of the Facility Agreement, and (b) recognize any of the payment of the First Installment in satisfaction of Tower's obligation to raise funds under section 16.27.2 of the Facility Agreement.

8. FAB 2 INVESTMENT AGREEMENTS. Except as expressly set forth in this Amendment and effective upon payment of the First Installment in full, the Company hereby irrevocably waives, forever excuses and releases the Wafer Partners and their respective officers, directors and employees, from their obligation to exercise the Series A-5 Additional Purchase Obligation as provided for in the Fab 2 Investment Agreements, including without limitation, the Additional Purchase Obligation Agreement. This Amendment supersedes all prior agreements, understandings and arrangements, oral or written, between the parties hereto with respect to the subject matter hereof. Notwithstanding the preceding sentence, the provisions of the Parties' Fab 2 Investment Agreements shall remain unchanged to the extent they are not amended by the terms of this Amendment.

[END OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have executed this Amendment as of the date first above written.

TOWER SEMICONDUCTOR LTD.

By: _____

Title: Co-CEO

ISRAEL CORPORATION TECHNOLOGIES (ICTECH) LTD.

By: _____

Title: _____

SANDISK CORPORATION

By: _____

Title: _____

ALLIANCE SEMICONDUCTOR CORPORATION

By: _____

Title: _____

MACRONIX INTERNATIONAL CO., LTD.

By: _____

Title: _____

QUICKLOGIC CORP.

By: _____

Title: _____

THE CHALLENGE FUND-ETGAR II, LP

By: _____

Title: _____

EXHIBIT A

WAFER PARTNER OR EQUITY PARTNER	FIRST INSTALLMENT	SECOND INSTALLMENT
SanDisk Corp.	\$6,600,420	\$4,400,280
Alliance Semiconductor Corp.	\$6,600,420	\$4,400,280
Macronix International Co., Ltd.	\$6,600,420	\$4,400,280
QuickLogic Corp.	\$2,200,140	\$1,466,760
Israel Corporation Technologies (ICTech) Ltd.	\$4,400,004	\$2,933,336
The Challenge Fund-Etgar II, LP	\$440,000.40	\$293,333.60

DEVELOPMENT AND LICENSING AGREEMENT

This Development and License Agreement ("Agreement") is entered into and effective as of 22 March 2002 ("Effective Date") by and between TOWER SEMICONDUCTOR, LTD., a company duly incorporated under the laws of Israel, having its principal place of business at Ramat Gavriel Industrial Area, P.O. Box 619, Migdal Haemek, Israel 23105, by and on behalf of itself and its wholly-owned subsidiaries ("Tower") and VIRAGE LOGIC CORPORATION, ("Virage Logic") a company duly incorporated under the laws of Delaware, USA, having its principal place of business at 46501 Landing Parkway, Fremont, California 94538 USA.

WHEREAS, Virage Logic is a provider of embedded memory solutions for the semiconductor industry; and

WHEREAS, Tower desires to have Virage Logic license to Tower and Tower's customer's an existing and/or future development of sub-micron memory compilers, including, but not limited to, the memory compilers set forth in Exhibit A and B, which consists of: (i) object code versions of a set of executable software programs, (ii) libraries containing design elements of memory cell arrays and control logic, and (iii) all related documentation, used for generating memory configurations as supplied to Tower by Virage Logic, based on Tower 0.18um technology (the "Compilers") for Tower's manufacturing services, and to have Virage Logic extend the Compilers to its customers;

NOW THEREFORE, the parties hereto agree as follows:

1. DEVELOPMENT AND DELIVERY OF THE COMPILERS

1.1 Development. Virage Logic agrees to develop for Tower the Compilers according to specifications as provided in Exhibit C ("Specifications") of this Agreement. Virage Logic agrees to provide to Tower the set of deliverables outlined in Exhibit A ("Deliverables ") and Exhibit B ("0.18u Full Product List"). The products listed in Exhibit B will be provided only in response for customer demand for such products. For the purposes of this Agreement, "customer demand" shall mean that the customer has issued a purchase order for such products or generation of one or more instances from such products. The products listed in Exhibit B will be provided to customers to promptly fulfill their purchase order requirements and will be provided at the current Virage Logic standard business practices that Virage Logic uses for Leading Foundries (as that term is defined in Exhibit I). Subject to the provision of section 4.9 of this Agreement, the scope of this Agreement shall include 0.18um technology, which may be extended to future technologies, by mutual agreement in writing.

1.2 Schedule. Virage Logic agrees to provide the set of Deliverables according to the schedule and milestones as provided in the Exhibit D ("Statements of Work"). Both Tower and Virage Logic shall conduct engineering reviews to track the progress on a weekly basis. For every milestone set forth Exhibit D, Virage Logic commits to allocate resources to meet the Schedule.

1.3 Tower Deliverables. Tower agrees to provide Virage Logic early access to the technical information listed in Exhibit E ("Tower Deliverables") for use by Virage solely in connection with developing the Compilers as set forth in this Agreement. Virage Logic understands that there may be potential changes to the information provided, and Tower agrees to use good faith and reasonable efforts to keep Virage Logic continuously updated on the most current version of information. Provided, however, that both parties understand that the scope of such changes may result in changes to the Schedule set forth in Exhibit D. Exhibit D shall be updated as necessary to reflect these changes to the schedule with no penalty imposed upon Virage Logic.

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1.4 Compilers. The Compilers will be an integration of (but not limited to) Tower-specific memory compilers, which contain bit cells developed by Virage Logic. The Compilers shall pass the quality assurance procedures set forth in Section 1.7 and shall also pass Tower's DRC procedure. Tower will consider Virage Logic's suggestions with respect to design rule modifications and interpretations.

1.5 Virage Logic and Tower shall hold joint periodic technical discussions in order to improve the probability that Tower-specific Compilers versions are industry-competitive. The objectives and schedules of such technical discussions are set forth in Exhibit D.

1.6 Schedule Changes. The Schedule set forth in Exhibit D shall be appropriately and equitably revised to reflect any delays resulting from changes to the specification implemented by either party and agreed to by both parties. The non-changing party shall have no liability as a result of Schedule change.

1.7 Quality Assurance. Within sixty (60) days of the Effective Date, Virage Logic agrees to provide to Tower the quality control programs and process utilized by Virage Logic in its normal course of business. Tower may suggest reasonable changes to such programs and processes and the parties agree to discuss in good faith implementing programs and processes that incorporate such changes, as appropriate.

1.8 Silicon Characterization. As part of any final characterization, Virage Logic will provide a silicon characterization report in accordance with its

standard practices. Tower may suggest reasonable changes to practices, and the parties agree to discuss in good faith implementing practices that incorporate such changes, as appropriate.

1.9 Test Chips. Tower agrees to allow Virage Logic to use Tower's silicon shuttle program, as available, for the manufacture of 50 test chips per run, up to two such shuttle runs at no charge to Virage Logic. Virage Logic agrees to promptly provide Tower with a test characterization report based on such test chips.

2. TIMING AND DESIGN TOOL REVISION

2.1 Virage Logic shall promptly revise the design kits in the Compilers at its own expense in the event of design tool revisions and changes, that are needed in order to keep the Compilers current with industry standards as set by Leading Foundries. Virage Logic shall re-characterize the Compilers, at its expense, for timing changes (e.g., due to changes in Tower's SPICE models). The re-characterization will be done a maximum of two times. Additional re-characterizations of the Compilers, that are requested by Tower will be paid for by Tower at the rate of [***]. The amount paid by Tower will cover the Compilers then currently available to Tower's customers. Compilers updated for timing and/or tool revisions will be provided to Tower, existing maintenance-paying customers, potential customers and for evaluation purposes.

- - - - -
[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

3. OWNERSHIP AND LICENSE

3.1 As between the parties, Virage Logic exclusively shall have all right, title and interest including all patent rights, copyrights, trade secret rights, mask work rights and other rights throughout the world (collectively "Intellectual Property Rights") in any inventions, intellectual property, trademarks, works-of-authorship, mask works, ideas or information made or conceived or reduced to practice by Virage Logic or by Virage Logic jointly with Tower and/or third parties in the course of development of the Compilers.

3.2 As between the parties, Tower exclusively shall have all Intellectual Property Rights in (a) any Tower Deliverables that exist prior to the Effective Date and (b) any inventions, intellectual property, trademarks, works-of-authorship, mask works, ideas or information made or conceived or reduced to practice by Tower or by Tower jointly with Virage Logic and/or third parties in the course of development of the Tower Deliverables.

3.3 If, during the term of this Agreement, the parties anticipate that the development of any future products that may involve joint ownership of such future products, the parties agree to negotiate a separate agreement.

3.4 Tower acknowledges and agrees that the Compiler contains trade secrets and other proprietary information of Virage Logic. In order to protect those trade secrets and other proprietary information, Tower agrees that, except as expressly permitted under applicable law, it will not reverse engineer, disassemble, or otherwise attempt to derive the source code form of the Compiler.

3.5 Tower acknowledges and agrees that all output generated for Tower by Virage Logic as described in the Agreement, or generated by Tower through use of the Compilers licensed hereunder contains information that complies with the Virtual Component Identification Physical Tagging Standard (VCID) as maintained by the Virtual Socket Interface Alliance (VSIA). Such information may be expressed in the specific GDSII layer designated by the VSIA, hardware definition languages, or other formats. Tower is not authorized to alter or change any such information.

4. CONSIDERATION

4.1 In consideration of the 0.18um Compilers developed herein, Tower shall pay to Virage Logic [***] pursuant to the schedule set forth in Exhibit A.

4.2 Tower shall also pay to Virage Logic a royalty based compensation rate as specified in Sections 4.3, 4.4 and 4.5 on net sales revenues of production wafers (excluding test chips, engineering lots, embedded intellectual property cores, samples and other similar product) manufactured by Tower and sold to Tower Customers that contain die that include instance(s) generated by Compiler(s) ("Royalty-Bearing Products"). The net sales revenues are to be determined by Tower, in accordance with Tower's normal and customary business records under Generally Accepted Accounting Practices ("Net Sales Revenue"). Royalty based compensation payments will be strictly limited based on the wafers shipped and accepted through Tower that contain Compilers. Tower shall not pay any royalty based compensation for either engineering lots or any test chip wafers.

- - - - -
[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

4.3 Royalty Based Compensation Schedule for 0. 18um technology:

Total Cumulative Royalty Paid to Virage Logic	Maximum Royalty Rate
[***]	[***]
[***]	[***]
[***]	[***]

4.4 Allocation.

4.4.1 By Library Class. Except as set forth herein, [***]% of the above Maximum Royalty Rate shall be due for each library class integrated into Royalty-Bearing Products that utilize a instance(s) generated by Compiler(s). There are 2 library classes; standard cells (SCL) including input/output cells (I/O) and memory.1

4.4.2 Within a Library Class. In the event a Royalty-Bearing Product contains both a instance(s) generated by Compiler(s) and library components licensed from a third party for which Tower is contractually obligated to pay royalties in the same library class, the royalty due for instance(s) generated by Compilers under the affected library class(es) shall be reduced to [***]% of the applicable Maximum Royalty Rate.2

4.5 Royalty Obligation. Tower shall be obligated to pay royalties as stated herein to Virage Logic for any Tower customer design that is: (a) properly designated at time of production release to Tower by Tower's customer as containing instance(s) generated by Compiler(s) that have been so licensed under Tower's Library Program and (b) where such designs are manufactured by Tower. In the event that a customer designates to Tower that multiple library vendors contributed to the design, the royalties payable under this Agreement shall be in accordance with Section 4.4.

4.6 Tower agrees to use good faith and reasonable efforts to require that customers declare all designs as either "containing such instance(s) generated by Compilers " or "NOT containing such instance(s) generated by Compilers." Tower's sole liability shall be limited to recording its customers' assertions regarding such Compilers. Notwithstanding the above, if any of Tower's customers notifies Tower of errors or omissions discovered, Tower shall pay Virage Logic the owed applicable royalties, or Virage Logic shall refund to Tower the overpaid applicable royalties, in each case as stated under the terms of this Agreement.

4.7 Tower and Virage Logic shall work together to develop, within ninety (90) days of the Effective Date, an auditing system (including report format) to verify the royalty based compensation structure without violating the confidentiality of Tower's and Virage Logic's customers. Virage Logic agrees to provide reasonable assistance to Tower in developing the report format, and Tower agrees to provide reports to Virage Logic, via email addressed to TAPEOUT@VIRAGELOGIC.COM, no more frequently than quarterly.

[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

1 By way of example, if Compilers are integrated into a Royalty-Bearing Product while the total applicable Royalty Rate is [***]%, only [***]royalty shall be due on such products ([***]% for memory libraries).

2 By way of example, if memory libraries are integrated into a Royalty-Bearing Product while the total applicable Royalty Rate is [***]%, but a third party memory library is also integrated into such Royalty-Bearing Product, only [***]% royalty shall be due to Virage on such products.

4.8 Taxes. The amounts payable to Virage Logic pursuant to this Agreement are exclusive of any value added tax or sales or use tax that may be payable. Tower will reimburse Virage Logic for its payment of any such value added taxes or sales or use taxes based on the fees paid by Tower to Virage Logic hereunder. Virage Logic acknowledges that amounts payable to Virage Logic hereunder may be subject to withholding requirements and that Tower is authorized to withhold such required amounts from amounts otherwise payable to Virage Logic. Virage Logic will take full responsibility for obtaining any withholding tax certificates from relevant tax authorities for reduced withholding tax rates, and for processing any claims for tax credits, etc. associated with withholding provided that Tower shall provide all such assistance as Virage Logic may reasonably require in obtaining such withholding tax certificates.

4.9 0.13UM TECHNOLOGY. In the event Tower desires to license compilers for its 0.13um process technology from Virage Logic, Virage Logic agrees to license such compilers as set forth in Exhibit J to Tower at the same fees and under similar terms and conditions as set forth in this Agreement. [***]

5. DISTRIBUTION OF THE COMPILER

5.1 Distribution of Compilers. During the term of this Agreement, upon acceptance of the Compilers by Tower pursuant to Section 1.7 above, Virage Logic shall have non-exclusive and non-transferable rights to reproduce and distribute the Compilers to third party entities ("Compiler Licensees") without any payment of royalties or other fees to Tower. Virage Logic agrees to sign "license agreements" with the Compiler Licensees to authorize use of the Compilers.

5.2 Master License Agreement. Virage Logic's standard Master License Agreement is attached as Exhibit E for information only and shall serve as a basis for the license agreements Virage Logic will enter into with customers under the Tower/Virage Logic Library Program. Virage Logic agrees to inform Compiler Licensees (in the Master License Agreement or the Product Schedule thereto) that the licensed Compilers may be used only for manufacturing at Tower or Tower's designated facilities. Virage Logic shall have the right to make changes from time to time to the License Agreements so long as any such changes do not: (1) violate the terms of this Agreement, or (2) materially alter the basic license restriction that the Compiler Licensees may use the Compilers only for evaluation and for the design and tape-out of integrated circuits to be manufactured solely at Tower or its designated manufacturing facilities. Virage Logic agrees to offer to Tower's customers the same Master License Agreements it offers to the customers of Leading Foundries.

5.3 Virage Logic agrees that it will offer its standard Master License Agreement with its standard COT pricing on the current Virage Logic Price List as offered to the customers of Leading Foundries (or more favorable pricing) to all Tower Customers. The parties agree that Virage Logic may make changes that are not permitted under Section 5.2 to the Master License Agreement on a case-by-case basis for particular Compiler Licensees; provided that, Tower's consent has been obtained in writing (email with appropriate acknowledgment and facsimile will be acceptable forms of writing for such consents). Tower agrees to not unreasonably withhold its consent to such changes.

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

5.4 Customer Support. Virage Logic shall be responsible for providing Compiler Licensees support for the Compiler distributed by Virage Logic. Virage Logic shall be free to set all terms and conditions for support, maintenance, engineering and customization services provided by Virage Logic to any Compiler Licensees; provided that Tower customers in the aggregate will be provided the same level of support at the same percentage of list price for support as customers of Leading Foundries unless Tower customers require abnormal amounts of support.

5.5 Distribution by Tower. Tower shall have the right to use and distribute the Compilers for Tower or its designated subcontractors' internal designs, including ASICs (at fees consistent with those for Leading Foundries) and embedded intellectual property cores (with no fees due in connection with the use by Tower of silicon intellectual property cores); provided that, Tower shall execute a Virage Logic Master License Agreement as described in Exhibit G of this Agreement. If required, support for Tower's internal use of the Compilers as described above may be purchased at Virage Logic's standard fees.

5.6 Licenses Requested by Tower. Upon written request by Tower, Virage Logic will, on reasonable terms and conditions, license and distribute the Compilers to (a) other third party design service providers creating designs that will be manufactured solely at Tower or Tower designated facilities; (b) distribute as necessary to library developers; or (c), distribute to fulfill Tower's current contractual obligations and to facilitate future contractual obligations. The terms of these aforementioned licenses will be mutually agreeable to Tower, Virage Logic, and the third party on a case by case basis. Virage Logic may decline to license the following competitors of Virage Logic: [***]. Virage Logic may unilaterally modify the above list of competitors at any time (upon written notice to Tower to include any additional competitors that sell, transfer, and/or license compilers and instances (designs of discrete integrated circuit memory cell arrays and corresponding control logic) that compete with Virage Logic products and Virage Logic shall, if requested by Tower, remove from the list any entities that no longer compete with Virage Logic.

5.7 Promotion of Compilers. Both Virage Logic and Tower shall actively promote the Compilers to customers of both parties ("Customers") using Virage Logic as the distributor of the Compilers. All licensees of Compilers will be granted a license for use of the Compilers and Deliverables solely for tape-out to Tower.

5.8 Reports. Virage Logic shall provide Tower a quarterly update of all Compiler Licensees who receive front-end Views and/or Back-End Views. Virage Logic shall not directly or knowingly indirectly make available the Compilers to any company on the list provided in Exhibit I without first obtaining Tower's consent in writing (email and facsimile will be acceptable forms of writing for such consents). Tower agrees to not unreasonably withhold its consent to such requests. Tower may unilaterally modify the above list of companies at any time by providing a revised Exhibit I to Virage Logic, but may not add to the list of Leading Foundries.

5.9 Quarterly Meetings. Both parties will jointly hold quarterly meetings to review performance as a participant in the Tower/Virage Logic Library Program beginning from the Effective Date. The Parties will assign liaison representatives at both corporate and regional levels. The liaison representatives are as follows:

[***][***][***][***][***][***][***][***][***][***]

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.
[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

5.10 Tower agrees to use good faith and reasonable efforts to managing the program for the useful life of the 0.18 process in the Compilers. If, due to changes in the business environment or other reasons, Tower chooses to alter the terms of this Agreement, then Tower agrees to give Virage Logic at least one-year notice before any of the terms in Section 4 of this Agreement can be altered so that Virage Logic can re-negotiate its agreements with customers. Notwithstanding the above, the one-year notice period will be waived due to any unforeseen circumstances to Tower.

6. TERM AND TERMINATION

6.1 Term. This Agreement shall have an initial term of five (5) years from the Effective Date, and shall automatically be renewed for successive one (1) year terms, unless either party gives sixty (60) days written notice of its intention not to renew the Agreement prior to the expiration of the term (including the initial term) then in effect.

6.2 Termination. This Agreement may be terminated early by either party if the other party (1) breaches any material provision of this Agreement and does not cure or remedy such breach within thirty (30) days after receipt of the written notice of breach from the other party; (2) becomes the subject of a voluntary or involuntary petition in bankruptcy or any proceeding relating to insolvency, receivership, liquidation, or composition for the benefit of creditors if such petition or proceeding is not dismissed with prejudice within sixty (60) days after filing. Termination of this Agreement shall be effective immediately upon issuance of a written notice of termination to the other party by the non-defaulting party.

6.3 Termination of this Agreement for any reason shall not affect (1) the obligations accruing prior to the effective date of termination and (2) any obligations under Sections, 3, 4, 6, (including 6.6, if a Release Condition has occurred), 7, 8, 9, 10, 11, 12, and current customer engagements hereof, all of which shall survive termination or expiration of this Agreement.

6.4 Return of Proprietary Information. Upon the effective date of termination, each receiving party shall cease to use and shall either destroy or return to the disclosing party all of the disclosing party's Proprietary Information in possession or under the receiving party's control during the term of this Agreement. Any related documentation and copies thereof, in whole or in part, in all forms of media, together with the receiving party's written certification by a duly authorized officer that the receiving party's Proprietary Information, and all related documentation and all copies thereof, in whole or in part, are no longer in use and have been returned to the disclosing party or destroyed; provided that Tower may retain Virage Logic Proprietary Information in the event it receives source code under Section 6.6, and such Proprietary Information is necessary or useful for exercising Tower's rights grants under Section 6.6 below.

6.5 No Waiver. Termination of this Agreement under this Section shall be in addition to, and not a waiver of, any remedy at law or in equity available to either party arising from the other party's breach of this Agreement.

6.6 Source Code Escrow. Virage Logic agrees to put into escrow a copy of the Compilers, excluding the GUI software, in human readable format ("Source Code"), in detail that is in accordance with the industry standard for such Source Code. Prior to Virage Logic putting the Source Code into escrow, the parties shall execute a source code escrow agreement that contains the provisions below:

6.6.1 Escrow Account. Within sixty (60) days of the signing of a source code escrow agreement between Tower, Virage Logic and Data Securities International ("Escrow Agent"), Virage Logic agrees to place in an escrow account, a copy of the Source Code. The escrow agreement shall contain, at a minimum, the terms and conditions set forth in this Section 6.6.1 and Section 6.6.2 below. Tower shall bear all effort, fees, expenses and other charges incurred to open and maintain such escrow account, including the arrangements for the escrow agreement itself. Virage Logic shall update the escrow account as necessary to maintain the most recent copy of the Source Code in the escrow account.

6.6.2 Release. Tower shall notify Virage Logic and Escrow Agent by certified mail in the event Virage Logic or its successors is unable or unwilling to provide support to Tower or Tower's maintenance-paying customers for the Compilers, (the "Release Condition"). Unless within fifteen (15) days thereafter Virage Logic files with the Escrow Agent its affidavit executed by a responsible executive officer clearly refuting the occurrence of Release Condition, the Escrow Agent shall upon the sixteenth (16th) day release the Source Code to Tower. In the event Virage Logic files such an affidavit, the parties agree to enter into binding mediation to resolve the dispute. The mediation shall be completed within thirty (30) days of either party's notification requesting a mediation. The mediator shall require pre-hearing exchange of documentary evidence to be relied upon by each of the respective parties in their respective cases in chief and pre-hearing exchange of briefs. The mediator will make her/his decision in writing; and his/her decision will be binding upon the Parties. In the event the mediator decides in favor of Tower, the parties shall send a joint notification to the Escrow Agent to immediately release the Source Code to Tower.

6.6.3 License. Upon the release of the Source Code hereunder, Tower shall have a license to modify, have modified and use the Source Code only in the event that the need for such use and/or modification is necessary to support current existing customer(s) of both Virage and Tower. Tower's license to use and/or modify Source Code released hereunder is strictly limited to only the Source Code associated with the process(es) for which support is required or anticipated to be required. Tower shall own all right title and interest in any modifications to the Source Code created by or for Tower; subject to Virage Logic's rights in the underlying Source Code. Tower agrees to grant Virage Logic a perpetual, royalty-free, worldwide, non-exclusive, fully-paid license to use such Tower modifications to create modified versions of the Source Code and to reproduce and distribute such modified versions of the Source Code in object code form.

7. DISCLAIMER OF WARRANTY

7.1 LIMITED COMPILER WARRANTY. Virage Logic warrants, for a period of [***] from the date Virage Logic delivers each of the Compilers to Tower, that each of such Compilers, as delivered, (a) will be free from defects in the media and will conform, except for immaterial or insubstantial non-conformances, to the Specifications of the Compilers provided to Tower by Virage Logic and (b) will, up to the point of transmission to Tower, contain no computer viruses, time-bombs or malicious code that could cause the Compilers to deviate materially from the Specifications, including but not limited to any code that would enable unauthorized access to, or damage, modify or disable a computer system or programs or data stored on or transmitted by such computer system. For purposes of this section 7.1, conformance of the NOVeA Compiler to its Specifications may only be deemed to be attained once the Compiler qualifies the mutually agreed upon Engineering Qual procedures and criteria specified in the NOVeA SOW attached herein in Exhibit D. In the event of non-conformance of the Compilers, Tower shall promptly notify Virage Logic and provide Virage Logic with all available information in written or electronic form so that Virage Logic can reproduce the non-conformance. Virage Logic's sole obligation is to correct the non-conformance reported to Virage Logic during the warranty period. The foregoing warranty does not apply to non-conformity caused by modification of a Compiler, combination of a Compiler with other products, or improper use of a Compiler.

7.2 SOLE AND EXCLUSIVE REMEDY. FOR ANY BREACH OF THE WARRANTY CONTAINED IN SECTION 7.1, TOWER'S SOLE AND EXCLUSIVE REMEDY WILL BE THAT VIRAGE LOGIC WILL, AT VIRAGE LOGIC'S OPTION, EITHER REPLACE OR CORRECT THE DEFECTIVE PORTION OF THE COMPILER WITHIN THIRTY (30) DAYS OF BEING INFORMED OF THE BREACH OF WARRANTY. [***]

7.3 TOWER WARRANTIES. Tower represents, warrants and covenants that: (a) Tower has sufficient corporate power to enter into this Agreement; (b) Tower has the rights and abilities to perform its obligations hereunder; and (c) the Tower Semiconductor Deliverables will, up to the point of transmission to Virage Logic, contain no computer viruses, time-bombs or malicious code that could cause the Compilers to deviate materially from the Specifications, including but not limited to any code that would enable unauthorized access to, or damage, modify or disable a computer system or programs or data stored on or transmitted by such computer system.

7.4 VIRAGE LOGIC WARRANTIES. Virage Logic represents, warrants and covenants that: (a) Virage Logic has sufficient corporate power to enter into this Agreement; and (b) Virage Logic has the rights and abilities to perform its obligations hereunder.

7.5 DISCLAIMER OF OTHER WARRANTIES. EXCEPT FOR THE ABOVE EXPRESS LIMITED WARRANTY, THE COMPILERS, KNOW-HOW, AND DOCUMENTATION, AND THE TOWER DELIVERABLES, ARE LICENSED "AS IS," AND NEITHER PARTY MAKES ANY OTHER WARRANTIES, EXPRESS AND IMPLIED REGARDING THE COMPILERS, DESIGN TECHNIQUES OR DOCUMENTATION, OR THE TOWER DELIVERABLES, AS THE CASE MAY BE, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. AND NONINFRINGEMENT. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, VIRAGE LOGIC DOES NOT WARRANT THAT THE COMPILERS WILL MEET TOWER'S REQUIREMENTS, THAT THE COMPILERS WILL OPERATE IN THE COMBINATIONS THAT TOWER MAY SELECT OR USE, THAT THE OPERATION OF THE COMPILERS WILL BE UNINTERRUPTED OR ERROR FREE, OR THAT ALL ERRORS IN THE COMPILERS WILL BE CORRECTED.

8. LIMITATION OF LIABILITY

8.1 DIRECT DAMAGES. VIRAGE LOGIC'S TOTAL LIABILITY FOR DIRECT DAMAGES UNDER THIS AGREEMENT SHALL NOT EXCEED ALL PAYMENTS (INCLUDING LICENSE FEES AND ROYALTY PAYMENTS) RECEIVED BY VIRAGE LOGIC FROM TOWER AND TOWER'S TOTAL LIABILITY FOR DIRECT DAMAGES UNDER THIS AGREEMENT SHALL NOT EXCEED [***]; PROVIDED THAT EACH PARTY'S LIABILITY FOR CLAIMS ARISING OUT OF SECTION 10 BELOW SHALL BE AS FOLLOWS: (I) FOR CLAIMS COVERED BY SECTIONS 10.1(i), 10.1(ii), 10.5(i) or 10.5(ii) EACH PARTY'S TOTAL LIABILITY SHALL BE LIMITED TO [***]; and (II) FOR CLAIMS COVERED BY SECTIONS 10.1(iii) or 10.5(iii), EACH PARTY'S LIABILITY SHALL BE LIMITED TO THE AMOUNTS PAID BY TOWER TO VIRAGE LOGIC PURSUANT TO THIS AGREEMENT AT THE TIME THE CLAIM IS SETTLED OR DAMAGES ARE AWARDED.

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

8.2 CONSEQUENTIAL DAMAGES. UNDER NO CIRCUMSTANCES, SHALL EITHER PARTY BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING IN ANY WAY OUT OF THIS AGREEMENT OR THE USE OF THE COMPILER, DESIGN TECHNIQUES AND DOCUMENTATION, HOWEVER CAUSED, (WHETHER ARISING UNDER A THEORY OF CONTRACT, TORT (INCLUDING NEGLIGENCE); OR OTHERWISE), INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOST PROFITS, LOSS OF DATA, OR COSTS OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES. THE LIMITATIONS ON EITHER PARTY'S LIABILITY SET FORTH IN THIS SECTION 8 SHALL APPLY NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY OF THE LIMITED REMEDIES SET FORTH IN SECTIONS 7.1 AND 8.1 ABOVE.

9. PROPRIETARY INFORMATION

9.1 Both parties agree to maintain Proprietary Information in confidence, not to make use thereof other than for the performance of this Agreement, to release it only to employees who have a reasonable need to know the same and who have signed written agreements requiring them to maintain its confidentiality, and not to release or disclose it to any third parties, without prior written consent of the disclosing party. Each party hereto shall provide proper and secured storage for papers, drawings, and other items containing Proprietary Information.

9.2 All Proprietary Information and any copies thereof remain the property of the disclosing party, and no license or other rights is granted or implied hereby. The receiving party shall, upon the disclosing party's request, return the original and all copies of tangible Proprietary Information.

9.3 This Section 9 shall survive the termination or expiration of this Agreement for a period of three (3) years.

10. PATENT AND COPYRIGHT INFRINGEMENT

10.1 TOWER INDEMNITY. Tower shall, at its own expense, subject to the limitations set forth in Sections 8.1 and 8.2 above, indemnify, hold harmless, and defend or at its option, settle any claim, suit, or proceeding brought by a third party against Virage Logic for infringement of (i) any third party's copyright or misappropriation of any third party trade secret, (ii) any patent issued as of the Effective Date knowingly infringed by Tower that is issued in the United States, Israel, Japan or the European Union, or (iii) any patent issued in the United States, Taiwan, Japan or the European Union that is unknowingly infringed by Tower, by virtue of Virage Logic's authorized use, reproduction, distribution and sublicensing of any of the Tower Deliverables as provided by Tower pursuant to the terms of this Agreement and shall pay any settlement amounts or damages finally awarded in such claim, suit or proceeding; provided that Virage Logic: (a) promptly notifies Tower in writing of such claim, suit or proceeding, (b) gives Tower sole control over the defense and/or settlement of such claim, suit or proceeding, subject to the provisions of Section 10.10; and (c) fully cooperates and provides, at Tower's expense, all available information, assistance and authority to defend or settle the claim, suit or proceeding. Tower shall not be liable for any costs, expenses, damages or fees incurred by Virage Logic in defending such action or claim unless authorized in advance in writing by Tower. This Section 10.1 shall not apply to infringement caused by of modifications to the Tower Deliverables as provided by Tower or arising out of combination of the Tower Deliverables with other technology, if such infringement would have been avoided but for such modifications or combinations.

10.2 TOWER CONTROL. Any action to be brought to prevent or enjoin any third party from infringement of any patent, copyright or other proprietary rights of Tower with respect to Tower Deliverables shall be brought exclusively by Tower or Tower's designee, in Tower's sole discretion and as between Tower and Virage Logic, at Tower's sole cost and expense.

10.3 POTENTIAL INFRINGEMENT. If the Tower Deliverables are, or in Tower's opinion are likely to become, the subject of a claim, suit, or proceeding alleging infringement, Tower will: (a) procure at no cost to Virage Logic, the right to continue using, reproducing, distributing and sublicensing the Tower Deliverables; (b) replace or modify the Tower Deliverables, at no cost to Virage Logic, to make them non-infringing, provided that substantially the same function is performed by the replacement or modified Tower Deliverables, or (c) if the right to continue using, reproducing, distributing and sublicensing the Tower Deliverables cannot be reasonably procured for Virage Logic or the Tower Deliverables cannot be replaced or modified to make them non-infringing, Tower may terminate the license of such Tower Deliverables hereunder; provided, that Tower's indemnity obligations shall continue indefinitely as to all use, reproduction, distribution and sublicensing of the Tower Deliverables prior to such termination.

10.4 SOLE OBLIGATION. The foregoing states Tower's sole obligations and entire liability with respect to any claim of infringement of the Tower Deliverables of any intellectual property or other rights of any third party.

10.5 VIRAGE LOGIC INDEMNITY. Virage Logic shall, at its own expense, subject to the limitations set forth in Sections 8.1 and 8.2 above, indemnify, hold harmless, and defend or at its option, settle any claim, damages, suits, or proceeding brought by a third party against Tower: (i) for infringement of any third party's copyright or misappropriation of a third party trade secret, (ii) for infringement of a third party patent issued as of the Effective Date in the United States, Taiwan, Japan or the European Union where such patent was knowingly infringed by Virage Logic; and (iii) for infringement of a third party patent issued in the United States, Israel, Japan or the European Union where such patent was unknowingly infringed by Virage Logic, by virtue of Tower's authorized use, reproduction, distribution and sublicensing of any of the Compilers pursuant to the terms of this Agreement, and shall pay any settlement amounts or damages finally awarded in such claim, suit or proceeding; provided that Tower: (a) promptly notifies Virage Logic in writing of such claim, suit or proceeding, (b) gives Virage Logic sole control over the defense and/or settlement of such claim, suit or proceeding, subject to the provisions of Section 10.10; and (c) reasonably cooperates and provides, at Virage Logic's expense, all available information, assistance and authority to defend or settle the claim, suit or proceeding. Virage Logic shall not be liable for any costs, expenses, damages or fees incurred by Tower in defending such action or claim unless authorized in advance in writing by Virage Logic. This Section 10.5 shall not apply to infringement caused by modifications to the Compilers as provided by Virage Logic or arising out of combination of the Compilers with other technology, if such infringement would have been avoided but for such modifications or combinations.

10.6 VIRAGE LOGIC CONTROL. Any action to be brought to prevent or enjoin any third party from infringement of any patent, copyright or other proprietary right of Virage Logic with respect to the Compilers shall be brought exclusively by Virage Logic or Virage Logic's designee, in Virage Logic's sole discretion and as between Virage Logic and Tower, at Virage Logic's sole cost and expense.

10.7 POTENTIAL INFRINGEMENT. If the Compilers are, or in Virage Logic's opinion are likely to become the subject of a claim, suit, or proceeding alleging infringement, Virage Logic will: (a) procure at no cost to Tower, the right to continue using, reproducing, distributing and sublicensing the Compilers; or (b) replace or modify the Compilers, at no cost to Tower, to make them non-infringing, provided that substantially the same function is performed by the replacement or modified Compilers, or (c) if the right to continue using, reproducing, distributing and sublicensing the Compilers cannot be reasonably procured for Tower or the Compilers cannot be replaced or modified to make them non-infringing, Virage Logic may terminate the license of such Compilers hereunder; provided, that Virage Logic's indemnity obligations shall continue indefinitely as to all use, reproduction, distribution and sublicensing of the Compilers to such termination.

10.8 SOLE OBLIGATION. The foregoing states Virage Logic's sole obligations and entire liability with respect to any claim infringement of the Compilers of any intellectual property or other rights of any third party.

10.9 DESIGNATION OF DAMAGES. The parties agree that any amounts that may be payable by either party under this Section 10 shall designated as being Direct Damages for purposes of Article 8 of this Agreement.

10.10 APPROVAL OF SETTLEMENT. In the event of a settlement or consent decree that requires (a) payment in excess of the indemnifying party's Limitation of Liability as set forth in Section 8.1(I), (b) an admission of liability by the non-indemnifying party, or (c) entry of injunctive relief against the non-indemnifying party, the indemnifying party must obtain the prior written consent of the non-indemnifying party prior to any such settlement or consent decree. Such written consent shall not be unreasonably withheld.

11. GENERAL TERMS

11.1 CHOICE OF LAW. This Agreement shall be governed by and construed in accordance with the laws of State of California, excluding its conflict of laws provisions. In the event of any dispute arising out of or in connection with this Agreement, which cannot be amicably settled by the parties hereto, the parties agree to submit any such dispute to binding arbitration in accordance with the Rules of Arbitration of the International Chamber of Commerce by three (3) arbitrators appointed in accordance with the said rules. The arbitral proceedings shall be conducted in the English language and shall take place in London, England. All information relating to or disclosed by either party in connection with the arbitration shall be treated by the parties as confidential information and no disclosure of such information shall be made by either party without the prior written consent of the other party.

11.2 EXPORT CONTROLS. Both parties agree and certify that neither party will export or re-export the materials (including the Compilers and any other technical data received from Virage Logic), nor the direct product thereof, will be outside the United States except as authorized and as permitted by the laws and regulations of the United States.

11.3 ASSIGNMENT. This Agreement may not be assigned by either party without the prior written consent from the other party, which consent shall not be unreasonably withheld; provided that no such consent will be required in the event of an assignment to any successor to all or substantially all of the business assets of such Party so long as the buyer acknowledges the obligations of such Party hereunder. Notwithstanding anything to the contrary in this Section 11.3, neither party may assign this Agreement to any direct competitor of the other, as those competitors are set forth in this Agreement, without first obtaining the consent of the non-assigning party, which may be withheld in the non-assigning party's sole discretion; and provided further that this Agreement may be pledged by Tower for the benefit of Bank Hapoalim B.M. and Bank Leumi Le-Israel B.M. (collectively, the "Banks") to secure debt financing made available to Tower in connection with the construction of Tower's new wafer fab. Any purported assignment in contravention of this Section 11.3 shall be null and void.

11.4 AUDIT. Tower shall keep full and accurate books and records pertaining to Tower's performance under this Agreement for a period of at least one (1) year after the date a given quarterly payment is made by Tower to Virage Logic. Tower shall permit a mutually appointed third party, who has signed a Tower NDA, on behalf of Virage Logic, to examine such books and records, at Virage Logic's sole cost and expense, upon reasonable prior written notice during normal working hours, but not later than one (1) year following the payment in question, for the sole purpose of verifying the compensation payments and reports and accountings related thereto. Prompt adjustment shall be made to compensate for any errors or omissions disclosed by such examination. In the event such examination shows underreporting and underpayment in excess of five percent (5%) for any twelve (12) month period ending 3 months prior to the date of such examination, then Tower shall pay Virage Logic the reasonable costs of any such examination as well as the unpaid compensation payments.

11.5 NOTICES. Any notice, report, approval or consent required or permitted hereunder shall be in writing and will be deemed to have been duly given if delivered personally or transmitted via reputable international courier service to the respective addresses of the parties as set forth in this Agreement. If to Virage Logic, Attention: VP Finance, CFO. If to Tower, Attention: VP Marketing and Sales. Notices shall be effective upon receipt.

11.6 NO WAIVER. Failure by either party to enforce any provision of this Agreement will not be deemed a waiver of future enforcement of that or any other provision.

11.7 INDEPENDENT CONTRACTORS. The relationship of Virage Logic and Tower established by this Agreement is that of independent contractors, and nothing contained in this Agreement shall be construed (i) to give either party the power to direct or control the day-to-day activities of the other or (ii) to constitute the parties as partners, joint ventures, co-owners or otherwise as participants in a joint or common undertaking.

11.8 SEVERABILITY. If a court of competent jurisdiction finds any provision of this Agreement, or portion thereof, to be invalid or unenforceable, that provision of the Agreement will be enforced to the maximum extent permissible so as to effect the intent of the parties, and the other provisions of this Agreement will remain in force.

11.9 ATTORNEYS' FEES. The prevailing party in any action to enforce the Agreement shall be entitled to recover the costs and expenses including, without limitation, reasonable attorneys' fees.

11.10 INJUNCTIVE RELIEF. The parties agree that a material breach of this Agreement adversely affecting both parties' Intellectual Property Rights which would cause irreparable injury to non-breaching party for which monetary damages would not be an adequate remedy. Therefore, the parties agree that the non-breaching party shall be entitled to seek equitable relief in addition to any remedies it may have hereunder or at law.

11.11 FORCE MAJEURE. Except for the obligation to make payments hereunder, nonperformance of either party shall be excused to the extent that performance is rendered impossible by strike, fire, flood, governmental action, failure of suppliers, earthquake, or any other reason where failure to perform is beyond the reasonable control of the non-performing party. If such nonperformance extends beyond thirty (30) days, the other party shall be entitled to terminate this Agreement.

11.12 ENTIRE AGREEMENT. This Agreement, including all exhibits, constitutes the entire agreement between the parties with respect to the subject matter hereof, and supersedes all prior agreements or representations, oral or written, regarding such subject matter. This Agreement may not be modified or amended except in writing, signed by duly authorized representatives of both parties.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed in duplicate on their behalf by their duly-authorized officers and representatives on the date given above.

TOWER SEMICONDUCTOR LTD.

VIRAGE LOGIC CORPORATION

By:

By:

Name:

Name:

Title:

Title:

Address:RAMAT GAVRIEL INDUSTRIAL AREA

Address:46501 LANDING PARKWAY

P.O. BOX 619

FREMONT, CALIFORNIA 94538

MIGDAL HAEMEK, ISRAEL 23105

USA

Facsimile: 972-4-6547788

Facsimile: 510-360-8099

The following exhibits are hereby incorporated into this Agreement in their entirety:

- Exhibit A - Virage Logic Deliverables to Tower
- Exhibit B - 0.18u Full Product List
- Exhibit C -Virage Logic Compiler Specifications
- Exhibit D -Statements of Work
- Exhibit E - Tower Semiconductor Deliverables to Virage Logic
- Exhibit F - Virage Logic Compiler Pricing
- Exhibit G - Virage Logic Master License Agreement
- Exhibit H - Virage Logic Program Schedule
- Exhibit I - Tower List of Companies
- Exhibit J - 0.13u Full Product List

CONFIDENTIAL PORTIONS OF THIS AGREEMENT HAVE BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT.

MASTER SERVICES AND LICENSE AGREEMENT

This Master Services and License Agreement Number _____ (this "Master Agreement"), with an "Effective Date" of June __, 2002, is made by and between Artisan Components, Inc., a Delaware corporation, with its principal place of business at 141 Caspian Court, Sunnyvale, California 94089, United States of America (hereinafter referred to as "Artisan Components"), and Tower Semiconductor Ltd., a company organized under the laws of Israel with its principal place of business at Ramat Gavriel Industry Zone, Migdal Haemek, 23105 Israel (hereinafter referred to as "Customer").

RECITALS

WHEREAS, Customer operates manufacturing facilities for the production of semiconductors designed and ordered by its customers; and

WHEREAS, Artisan Components develops standard cells, I/O cells and embedded memories (the "Artisan Products"), which it licenses to end users such as Customer's customers for use in designing and manufacturing semiconductors; and

WHEREAS, in order for semiconductors incorporating the Artisan Products to be manufactured by Customer, the Artisan Products must be customized for use with Customer's manufacturing processes, and Customer wishes to have Artisan Components undertake such customization, working at its facilities in Sunnyvale, California; and

WHEREAS, Customer wishes for competitive reasons to have Artisan Components make the customized Artisan Products available to Customer's customers for use in the design of their semiconductors, such design to be done by the Customer's customers or their service providers at the Customer customers' facilities; and

WHEREAS, in consideration of the services performed and Artisan Products provided to Customer's customers by Artisan Components hereunder, Customer agrees to pay the service fees, license fees, royalties and support and maintenance fees set forth herein, in lieu of charges paid by the end user to providers of standard cells, I/O cells and embedded memories.

NOW, THEREFORE, for good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

1. DEFINITIONS

1.1 "AFFILIATE" means any corporation or other business entity in which, but only for so long as, Customer owns or controls directly or indirectly, at least 50% of the outstanding stock or other voting rights entitled to elect directors.

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DRAFT DATED JUNE 24, 2002

1.2 "BACK-END VIEWS" means the library element physical design and related documentation deliverables, whether in object code, reconfigurable binary, ASCII data, binary data, or any other form, as identified in Appendix A-1 to the Product Schedule.

1.3 [***] means any [***] or [***] that [***] and/or [***] for [***] standard cells, [***] and/or [***] and is listed in [***], which may be updated by Artisan Components from time to time by providing notice to Customer in accordance with Section 17.

1.4 "CUSTOMER'S MANUFACTURING SITE(S)" means manufacturing facilities for integrated circuits owned or controlled by Customer or its Affiliates, and third party owned manufacturing facilities for integrated circuits to the extent they are under contract to Customer for manufacturing integrated circuits (as provided in Section 2.4).

1.5 "DESIGN" means any integrated circuit, integrated circuit mask, design database or graphical representation of a design database containing representations of Licensed Product(s) (or portions thereof) or designed with data from Licensed Product(s) from Artisan Components in any of its various formats, including but not limited to: circuit schematics, ASCII or binary data, logic diagrams, simulation models, physical layout, hardware description languages, timing characteristics and netlists.

1.6 "ELECTROART" means any deliverables provided by Artisan Components to Customer pursuant to the Artisan Components ElectroArt Technology Development Program ("ElectroArt Program"), including but not limited to GDSII data and report(s) provided in connection with the ElectroArt Program.

1.7 "FRONT-END VIEWS" means the library element timing, simulation models, logical symbols, floor planning abstracts and related documentation deliverables as identified in Appendix A-1 to the Product Schedule.

1.8 "INTELLECTUAL PROPERTY" means worldwide patent rights, copyrights, trade secret rights, mask work rights and other intellectual property rights.

1.9 "INTERNAL USE DOCUMENTATION" means the Internal Use Documentation, if any, listed in Appendix A-1 to the Product Schedule. The Internal Use Documentation is Confidential Information of Artisan Components and may not be disclosed or distributed to third parties.

1.10 "LICENSE AGREEMENT" shall have the meaning set forth in Section 2.1.

1.11 "LICENSE AGREEMENT EFFECTIVE DATE" means the License Agreement Effective Date as set forth in the Product Schedule.

1.12 "LICENSE AND CUSTOMIZATION SERVICE FEES" shall have the meaning set forth in Section 7.2.

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

1.13 "LICENSED INTEGRATED CIRCUIT" shall mean a single die (or if Customer is a foundry, a piece of silicon wafer) in whole or in part manufactured Using all or any portion of the Licensed Product(s) and/or a single die (or if Customer is a foundry, a piece of silicon wafer) that in whole or in part is made up of, incorporates or is based upon any portion of a Design and/or Licensed Product(s).

1.14 "LICENSED PRODUCT(S)" means the products described in Appendix A-1 to the Product Schedule, and any Updates thereto, whether in object code, re-configurable binary, ASCII data, binary data or any other form. Licensed Product(s) includes the Back-End Views, Front-End Views and Internal Use Documentation.

1.15 "MASTER AGREEMENT EFFECTIVE DATE" means the "Effective Date" for this Master Agreement as set forth in the preamble hereof.

1.16 "PRODUCT SCHEDULE" means a Product Schedule in the form of Exhibit C, signed by Artisan Components and Customer and incorporating, by reference, the terms and provisions of this Master Agreement.

1.17 "REQUIRED DATA" shall have the meaning set forth in Section 2.8.

1.18 "UPDATE(S)" means (a) any error correction to a Licensed Product made by or for Artisan Components, which Artisan Components provides to Customer under the maintenance as described in Appendix C-1 to the Product Schedule, if applicable, and (b) any other derivative work, extension, modification or feature enhancement for process node variants to a Licensed Product made by or for Artisan Components, which Artisan Components in its sole discretion releases to any of its licensees free of charge. Updates shall not include any new or additional features, enhancements, or options which increase the basic functionality of the Licensed Product, for which Artisan Components charges its licensees a separate or additional fee.

1.19 "USAGE, USING, USE OR USED" means the transmitting, processing, storing, designing with or displaying of any portion of the Licensed Product(s) through the use of computer and/or video equipment and/or other utilization of any portion of the Licensed Product(s), in each case solely for the purpose of designing Licensed Integrated Circuits and manufacturing Licensed Integrated Circuits at Customer's Manufacturing Site(s). "Usage, Using, Use or Used" does not include the modifying of any Licensed Product(s) or portion thereof (except as specifically allowed under Section 2.7), and no rights or licenses to modify any Licensed Product(s) or portion thereof are granted hereunder.

1.20 "WAFER" shall mean a combination of die in whole or in part manufactured Using all or any portion of the Licensed Product(s) and/or a combination of die that in whole or in part is made up of, incorporates or is based upon any portion of a Design and/or Licensed Product(s).

2. LICENSE GRANT AND RELATED TERMS

2.1 Each Product Schedule shall constitute a separate and independent License Agreement (a "License Agreement"), which shall incorporate by reference the terms and conditions of this Master Agreement; the original of such License Agreement shall consist of the signed Product Schedule and a copy of this Master Agreement. Capitalized terms used, but not defined, in this Master Agreement have the meanings given to such terms in the Product Schedule.

2.2 Subject to the terms and conditions stated herein, upon full satisfaction of Customer's obligations to pay the License and Customization Service Fees, Artisan Components grants to Customer a non-transferable, non-exclusive, royalty-bearing license, for the License Agreement Term set forth in the Product Schedule, to:

(A) Use the Licensed Product(s);

(B) reproduce the Licensed Product(s);

(C) distribute the Front-End Views to third party entities who are not [***], and only (i) as needed for the purpose of supporting Customer's customers IC design and Customer's manufacture business as it relates to Licensed Integrated Circuits; or (ii) for such third parties to internally use the Front-End Views to design integrated circuits for manufacture by Customer pursuant to the terms and conditions of this Master Agreement;

(D) distribute the Back-End Views to third party entities who are not[***], only (i) as needed for the purpose of supporting Customer's customers IC design and Customer's manufacture business as it relates to Licensed Integrated Circuits; or (ii) for such third parties to internally use the Back-End Views to design integrated circuits for manufacture by Customer pursuant to the terms and conditions of this Master Agreement, and in either case subject to the additional conditions set forth in this Section 2.2(d). Customer must give Artisan Components written prior notice of the recipient entity and Back-End Views to be disclosed, and such disclosure and distribution of the Back-End Views may be made only to entities who are under a nondisclosure/restricted use agreement with Customer which provides at a minimum for the following protections: (i) a confidentiality provision sufficient to protect the Back-End Views from further disclosure/distribution; (ii) a restricted use provision that is sufficient to limit use of the Back-End Views for the design of Licensed Integrated Circuits and/or manufacture of Licensed Integrated Circuits at Customer's Manufacturing Site(s); and (iii) a third party beneficiary rights provision giving Artisan Components third party beneficiary rights to enforce the nondisclosure/restricted use agreement.

2.3 Subject to the terms and conditions stated herein, upon full satisfaction of Customer's obligations to pay the License and Customization Service Fees, Artisan Components grants to Customer a non-transferable, non-exclusive license, for the License Agreement Term set forth in the Product Schedule, to use ElectroArt (if ElectroArt is included in a Product Schedule) solely for Customer's internal review and evaluation for the purpose of working with Artisan Components on royalty-bearing Licensed Product development by Artisan Components for Customer. Customer's right to use ElectroArt shall be subject also to the terms and conditions applicable to Licensed Product(s) of Sections 4 through 21 of this Master Agreement.

[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

2.4 Customer may sublicense its Affiliates to Use the Licensed Product(s) solely in the course of designing and manufacturing Licensed Integrated Circuits on behalf of Customer in accordance with the terms and conditions herein; provided, that (i) any such Affiliates must execute a written nondisclosure agreement no less protective than the License Agreement to protect against the unauthorized use and disclosure of the Licensed Product(s) (including any further disclosure/distribution by such Affiliates) and to ensure that all Wafers are reported and paid for as required under the License Agreement; and (ii) the disclosure/distribution of Front-End Views and Back-End Views to any Affiliates must meet all the conditions of Sections 2.2(c) and 2.2(d), as applicable (e.g., can't be a [***] etc.). Further, Customer shall maintain with the owners and operators (the "Operators") of all Customer Manufacturing Sites that are not owned by Customer or Affiliates, agreements which provide at a minimum, the following protections for Artisan Components: (i) a nondisclosure agreement no less protective than the License Agreement to protect against the unauthorized use and disclosure of the Licensed Product(s) (including any further disclosure/distribution by such Operators) and to ensure that all Wafers are reported and paid for as required under the applicable License Agreement; (ii) a clause granting Artisan Components audit rights regarding the Operators' books and records, consistent with the audit provisions of Section 7.8; and (iii) a third party beneficiary rights provision giving Artisan Components third party beneficiary rights to enforce such agreement. Customer shall provide Artisan Components with a copy of each such agreement as well as Customer's best estimate of Wafers to be manufactured by the applicable Operator. An entity may not qualify as the owner or operator of a Customer Manufacturing Site if such entity is located in, or if its facility is in, the People's Republic of China without Artisan Components' prior written consent. Customer is responsible for any unauthorized use or disclosure of the Licensed Product(s), and any and all manufacture of (and payment, including royalties, for) Wafers, by its Affiliates, Operators and contractors. Customer may allow third party contractors access to and Use of the Licensed Product(s) solely to the extent that such contractors require such access in the course of their assigned duties with Customer or its Affiliates, subject to Section 8 (Export Restrictions) and provided that (i) such third party contractors are not Competitors of Artisan Components, (ii) the use of the Licensed Product(s) are solely for the benefit of Customer, and (iii) any such third party contractor must execute a written nondisclosure agreement no less protective than the License Agreement to protect against the unauthorized use and disclosure of the Licensed Product(s) (including any further disclosure/distribution by such third party contractor), which agreement shall also include a third party beneficiary rights provision giving Artisan Components third party beneficiary rights to enforce such agreement.

2.5 Certain elements of the Licensed Product(s) may be provided in files/data formatted for use with or by certain third party tools/products. No license to any third party tools/products is granted to Customer by Artisan Components. Customer must ensure that it and any parties it authorizes to Use the Licensed Product(s) in accordance with the License Agreement have the necessary licenses and rights to use the third party tools/products to utilize the Licensed Product(s).

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2.6 Except as expressly set forth in this Section 2, no rights or licenses to the Licensed Product(s), implied or express, are granted to Customer. Customer acknowledges and agrees that: (a) unauthorized reproduction, electronic transfer or other use of Licensed Product(s) which is not expressly authorized by this Section 2 is a breach of a material obligation of this Master Agreement and the License Agreement; and (b) in the event that unauthorized copies of Licensed Product(s) are made and/or Used by Customer, its Affiliates, and Artisan Components elects not to terminate the License Agreement pursuant to Section 9 hereof, Customer shall by virtue of such act(s) be deemed to order and accept a license for and shall pay Artisan Components the price and applicable royalties and support fees (all as set forth in this Master Agreement) for each such unauthorized production, electronic Use, other unauthorized Use, or transfer of Licensed Product(s), but only to the extent that the unauthorized product, electronic Use or other unauthorized Use or transfer otherwise would have generated revenue for Artisan Components had it been properly licensed or where Artisan Components would charge a royalty under its standard agreements. License and Customization Service Fees, support fees and previously accrued royalties shall be due, for purposes of Section 7, [***] days following discovery by Artisan Components of such unauthorized use.

2.7 [***]

(a) Customer may [***] and [***] of the Licensed Products (each a [***] and collectively, [***]) provided that such [***] are [***] to the following: (i) [***] (ii) [***] using Sage Modeler provided by Artisan Components to Customer hereunder; and (iii) [***] and further provided, that Customer shall [***] or [***] of the Licensed Products that are of a [***] (for example, a [***] process geometry [***] a [***] process geometry) or constitute a [***] (for example, a [***] than the Licensed Products that are [***]). Products containing one or more [***] shall be subject to royalties as if they were Licensed Products of the same process geometry. [***] do not include other cells or components owned by Customer and incorporated into its customers' Designs, provided such cells or components are not derived from any Licensed Product. All [***] shall be subject to all terms and conditions applicable to Licensed Products, except as modified by the following terms and conditions, which shall apply to all [***]: (i) Artisan Components has no warranty, indemnity, or support and maintenance obligations with respect to any Licensed Products containing one or more [***]; (ii) [***] to Artisan Components promptly, no later than [***] after the [***] is made by Customer; (iii) Customer shall provide Artisan Components with written notice of Customer's customer(s) intending to use one or more [***] prior to the distribution of any [***] to such customer(s); and (iv) Artisan Components shall have no obligation to distribute any [***] as part of Artisan Component's general library distribution program.

(b) Customer shall [***] all [***] and all [***] and [***] in or to those [***]. That [***] will be, however, subject to Artisan Components' rights in and to the Licensed Products (and Artisan Components reserves all rights in and to the Licensed Products that are not explicitly granted in this Agreement). Customer grants to Artisan Components a [***] to the [***], to reproduce and distribute, transmit, publicly perform and display, create derivative works of, and to make, use and sell products that are based on, that include, or that are derivative works of the [***] (and derivative works thereof).

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2.8 Customer agrees to provide Artisan Components with the data required from Customer ("Required Data") identified in Appendix A-1 to the Product Schedule (process information) and Customer authorizes Artisan Components to use such data/information for purposes of the License Agreement. Customer represents and warrants that it is authorized to provide to Artisan Components, and authorizes Artisan Components to use, the Required Data.

2.9 At Customer's direction, or upon Customer's consent, Artisan Components will distribute the Licensed Products (once completed) to Customer's customers, free of charge to Customer's customers, within [***] after execution by Artisan Components and the Customer's customer of an applicable End User License Agreement, for use by Customer's customer in designing, testing, and otherwise creating and verifying Designs for manufacture solely at Customer's Manufacturing Sites. For purposes of clarification, the parties agree that the only Licensed Products that Artisan Components shall be required to distribute to Customer's customers under this Section shall be Licensed Products that Artisan Components has previously delivered to Customer as completed deliverables. Artisan Components will distribute the Licensed Products pursuant to a separate agreement between Artisan Components and the Customer's customers governing the Customer's customers' use of the Licensed Products (the "End User License Agreement"), substantially in the same standard form and terms under which similar Artisan Components' products are provided to customers of leading foundries. Artisan Components shall offer support for the Licensed Products to Customer's customers pursuant to Artisan Components' customary support terms and fees. Such End User License Agreement, and any support agreement, shall be solely and exclusively between Artisan Components and Customer's customers. Artisan Components may charge its customary rates for support, maintenance, engineering and customization services provided by Artisan Components to any Customer's customer with no accounting to Customer for any such fees. With respect to support, Artisan Components agrees that Customer's customers may participate in its end user support programs. Currently, this program includes AccessBasic, a basic level of customer support for one type of Licensed Product, for [***] AccessFirst, a more comprehensive level of customer support for multiple Licensed Products, for [***] and AccessCustom, a customized support program for customers with special support needs that is priced on an individual basis. Customer's customers who are already paying Artisan Components for AccessFirst or AccessCustom support shall be entitled to receive support for the Licensed Products free of charge and at same level provided for the other Artisan Components products used by such customer. Manufacture will be permitted only at Customer's Manufacturing Site(s); provided, however, that Customer will pay to Artisan Components the agreed upon Royalties (as set forth in Section 7.2 of this Master License Agreement).

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3. SUPPORT CONDITION, SILICON DEBUGGING AND PRODUCT ENGINEERING

3.1 In consideration for the technical support and maintenance fees, [***] described in Appendix B-1 to the Product Schedule, Artisan Components will provide Customer with the technical support and maintenance described in Appendix C-1 to the Product Schedule, if applicable, for the Licensed Product(s). Such technical support and maintenance is available on an annual basis only and will be made available throughout the Term, on the terms and conditions set forth in Appendix C-1.

3.2 The design and verification techniques for the Licensed Product(s) used by Artisan Components depend on the accuracy of models, flows and design tools; some of which are provided by Artisan Components' licensees and their target foundries. Due to practical limits on the accuracy of these models, flows and design tools, the fabricated silicon behavior may not always agree with that predicted. In these cases, Artisan Components will assist Customer in silicon debugging and product engineering at Artisan Components' then current standard hourly rate plus applicable expenses. Silicon debugging and product engineering do not fall under the technical support and maintenance set forth in Section 3.1 above. To the extent Artisan Components provides any silicon debugging or product engineering, or otherwise provides Customer with any revisions and/or enhancements to the Licensed Product(s), except as otherwise agreed upon, such revisions and/or enhancements shall be Licensed Product(s) subject to the terms and conditions of the License Agreement.

4. TERM

This Master Agreement is effective as of the Master Agreement Effective Date and shall remain in full force and effect for a period of [***] unless earlier terminated as provided herein. Unless earlier terminated as provided herein, this Master Agreement will automatically renew at the end of each term for consecutive one (1) year renewal periods, unless either party notifies the other at least [***] prior to the end of the then current term that it does not desire this Master Agreement to renew for another year. Each License Agreement shall set forth a License Agreement Term which shall be applicable to it. By way of clarification, a decision by either party not to renew the maintenance and support agreement (Appendix C-1 to the Product Schedule) will not mean termination of this Agreement, and the term of the maintenance and support agreement, as set forth in Section 7 of Appendix C-1 to the Product Schedule, may not be the same as the term of this Agreement.

5. ORDER, CHANGES AND DELIVERY TERMS

5.1 All orders for Licensed Product(s) shall be evidenced by a Product Schedule executed by Customer and Artisan Components, and in connection therewith, Customer may issue to Artisan Components a written purchase order. Except as otherwise agreed in writing signed by an officer of Artisan Components, nothing contained in any purchase order submitted by Customer will in any way modify, delete or add any terms or conditions to said purchases and licenses, and Customer hereby waives such purchase order provisions.

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5.2 Artisan Components shall use reasonable commercial efforts to (i) maintain the development schedule; (ii) make available such people and other development resources as are reasonably necessary for Artisan Components to complete its development obligations on a timely basis, consistent with the development projections supplied by Artisan Components; and (iii) complete the delivery of the Licensed Products according to the schedule and milestones as provided in the Appendix A-1 to the Product Schedule. Customer and Artisan Components shall jointly conduct milestone meetings or conference calls on a weekly or bi-weekly basis as needed and periodic engineering reviews to assess progress in the development of the Licensed Products.

5.3 Changes to the scope of work either requested by and/or necessitated by Customer's specifications will be evaluated for both schedule and cost impact. Customer will be asked to complete an Engineering Change Order Request Form, an "ECO," and submit it to Artisan Components for review. After review of the ECO by Artisan Components, Artisan Components will notify the Customer in writing on its ECO Response Form of any schedule and/or price changes. Customer must provide written acceptance or refusal of the terms and conditions of the ECO Response Form within [***] of having been so notified. Failure to do so will cause Artisan Components to proceed with the project as if the Customer's ECO Request Form had never been received. If Customer's written notice is one of acceptance of the new schedule and/or costs, then the ECO will be deemed an amendment to the License Agreement pursuant to Section 21.4 hereof. Sample ECO Request and ECO Response Forms are attached as Exhibits A and B.

6. OWNERSHIP

6.1 Subject to the licenses granted herein, Artisan Components and its licensors retain all of their rights, title and interest in and to the Licensed Product(s) and all patent rights, trademarks, trade secrets, copyrights, mask work rights and all other proprietary rights therein or relating thereto; provided, however, that Artisan Components' ownership shall not extend to cells or components owned by Customer that are not derived from the Licensed Products. Except for the licenses granted in Section 2, no other grants of licenses or rights to Customer shall be implied from this Master Agreement or the License Agreement. Customer will reproduce, and will not alter or mark over, all proprietary notices of Artisan Components on the Licensed Product(s).

6.2 Subject to Artisan Components' ownership of the Licensed Product(s), Customer shall retain all of its ownership rights to Designs created or derived through the Use of the Licensed Product(s).

6.3 Except for Customer's process information disclosed to Artisan Components under this Master Agreement or the License Agreement, Artisan Components will have the irrevocable royalty-free right to use in the Licensed Product(s), and any other products offered or distributed by Artisan Components, any Customer contribution or voluntarily disclosed information provided to Artisan Components under the Master Agreement or the License Agreement, except for Confidential Information of Customer, which shall be subject to the confidentiality obligations set forth in Section 14 of this Agreement.

7. PAYMENT TERMS AND TAXES

7.1 Except as expressly specified herein, all payments submitted by Customer to Artisan Components under the License Agreement shall be non-refundable and non-creditable (except as specified in part IV of Appendix B-1 to Exhibit C).

7.2 Unless otherwise mutually agreed in writing, with respect to Licensed Product(s) ordered under the License Agreement, Customer shall pay to Artisan Components [***] of the total license fee(s) set forth in Appendix B-1 to the Product Schedule (the total amount of license fees set forth in Appendix B-1 to the Product Schedule shall hereinafter be referred to as the "License and Customization Service Fees") upon the License Agreement Effective Date net [***] (the "Initial Payment"), [***] of the License and Customization Service Fees for a specific Licensed Product upon Customer's receipt of such Licensed Product, [***] (the "Second Payment"), and the remaining [***] of the License and Customization Service Fees for a specific Licensed Product, [***] after Customer's receipt of such Licensed Product (the "Third Payment"). Artisan Components shall provide Customer with an invoice in the amount of the Initial Payment, such invoice due net [***] after the Effective Date, and Customer shall pay the invoice via wire transfer to the following account:

BANK NAME: [***]
ACCOUNT NAME: ARTISAN COMPONENTS, INC.
ABA #: [***]
Account #: [***]
For the account of: Artisan Components, Inc.

Upon delivery of each Licensed Product, Artisan Components will provide Customer with (a) an invoice in the amount of the Second Payment, such invoice due net [***] after the delivery date of such Licensed Product and (b) an invoice in the amount of the Third Payment, such invoice due net [***] after the delivery date of such Licensed Product. The Second Payment and Third Payment shall be made via an escrow account as set forth in Section 7.3. Notwithstanding the foregoing, if an ECO with a cost increase shall have been accepted by Customer, Customer shall pay such amounts at such times as set forth therein. The foregoing provisions of this Section 7.2 shall not limit the provisions of Section 7.4. Customer also shall pay to Artisan Components all amounts set forth in Section 2.6 with respect to unauthorized Use of Licensed Product(s).

7.3 Concurrent with the execution of this Agreement, the parties will enter into an escrow agreement in substantially the form attached hereto as Exhibit D. Artisan Components will have no obligations under the Master Agreement or the License Agreement until such escrow agreement has been executed by Customer and the escrow is fully funded.

[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

7.4 Within [***] after the end of each [***], Customer further shall compute and, if any, pay to Artisan Components the running royalties for Licensed Integrated Circuits, as set forth in Appendix B-1 to the Product Schedule with respect to Wafers, as applicable pursuant to Appendix B-1. Royalty calculations are made based on Wafers invoiced, and payment is to be made at the end of the [***] based on Wafers invoiced in such [***]. Customer shall submit to Artisan Components with such royalty payment a report stating (a) the part number for each Licensed Integrated Circuit (such part number may be abbreviated or modified in order to redact the name of the Customer's customer or otherwise prevent disclosure of such customer's confidential information), (b) the number of Wafers invoiced during such [***]; (c) royalties payable under the License Agreement for such [***]; (d) data and supporting calculations used by Customer to compute the royalties payable by Customer to Artisan Components with respect to such [***]; (e) the number of Wafers manufactured during the prior reporting period; (f) any adjustments made by Customer for the prior reporting period; and (g) other information as mutually determined by the parties. Artisan Components agrees that the aforementioned royalty payment report and all of its contents shall be deemed Customer's Confidential Information, as that term is defined in Section 14.2 of this Agreement.

7.5 Customer further shall pay to Artisan Components the technical support and maintenance fees as set forth in Appendix B-1 to the Product Schedule, subject to termination of maintenance and support as set forth in Appendix C-1 to the Product Schedule.

7.6 All invoices will be mailed to Customer's address specified in the opening paragraph of this Master Agreement, unless specified otherwise in the applicable Product Schedule or purchase order.

7.7 Any and all amounts payable under the License Agreement do not include any government taxes (including without limitation sales, use, excise, and value added taxes) or duties imposed by any governmental agency that are applicable to the export, import, or purchase of the Licensed Product(s) (other than taxes on the net income of Artisan Components), and Customer shall bear all such taxes and duties. When Artisan Components has the legal obligation to collect and/or pay such taxes, the appropriate amount shall be added to Customer's invoice and paid by Customer, unless Customer provides Artisan Components with a valid tax exemption certificate authorized by the appropriate taxing authority.

7.8 If any applicable law requires Customer to [***] from any payments to Artisan Components under this Master Agreement, Customer shall effect such [***], remit such amounts to the [***] and promptly furnish Artisan Components with [***] evidencing the payments of such amounts. Artisan Components shall provide all such assistance as Customer may reasonably require in obtaining such [***]. Notwithstanding the foregoing, in no event shall [***] to Artisan Components less than [***] of any payment specified hereunder (such payment measured prior to any [***]), regardless of any amount required by law to be [***]. Accordingly, if Customer has the legal obligation to [***] equal to more than [***] of an amount to be paid hereunder, Customer shall [***] such excess amount, but shall add to the payment such amount that Artisan Components receives [***] of the payment.

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7.9 With respect to Licensed Integrated Circuits and License and Customization Service Fees, royalties and other amounts which are payable to Artisan Components under the License Agreement, Customer shall keep complete and accurate books and records including but not limited to supporting documentation for the royalty calculations and manufacturing records. These records shall be retained for a period of [***] from the date of payment, notwithstanding the expiration or termination of the License Agreement. Upon ten (10) business days' advance notice and not more than once per year, Customer agrees to permit its books and records to be examined by either (i) a designee of Artisan Components agreed to in writing by Customer, or (ii) an independent CPA firm selected by Artisan Components or its designee, subject to the confidentiality provisions set forth in this Master Agreement, during normal business hours, to verify the accuracy of the License and Customization Service Fees, royalties and other amounts paid to Artisan Components under the License Agreement. Prompt adjustment shall be made by the parties for the net amount of any underpayment or overpayment of any and all License and Customization Service Fees, royalties and other amounts disclosed by such examination, with respect to the reporting period reviewed. If such an examination reveals an underpayment of more than [***], then Customer shall promptly reimburse Artisan Components for the reasonable cost of such examination. For purposes of this section, the independent CPA to be selected by Artisan Components will be either one or more of the following CPA firms or any of their successor entities: Ernst & Young; KPMG; PricewaterhouseCoopers; or Deloitte Touche.

7.10 All payment amounts stated in the License Agreement, and all payments to be made under the License Agreement, shall be in U.S. Dollars. If any currency conversion shall be required in connection with the calculation of amounts payable under the License Agreement, such conversion shall be made using the selling exchange rate for conversion of the foreign currency into U.S. Dollars, quoted for current transactions reported in The Wall Street Journal for the last business day of the calendar quarter to which such payment pertains.

7.11 Artisan Components reserves the right to charge Customer, and Customer agrees to pay, interest on late payments under the License Agreement at the lesser rate of (i) the [***] and [***] per year, or (ii) the maximum permitted by applicable law.

8. EXPORT RESTRICTIONS

This Master Agreement, the License Agreement, the Licensed Product(s), Licensed Integrated Circuits, and the rights granted under the License Agreement are subject to any and all laws, regulations, orders or other restrictions relative to export, re-export or redistribution of the Licensed Product(s) that may now or in the future be imposed by the government of the United States or foreign governments. Each Party agrees to comply with all such applicable laws and regulations.

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

9. TERMINATION

9.1 Either party may, in its sole discretion, terminate this Master Agreement and any or all License Agreements and the licenses granted hereunder, upon written notice to the other party, upon the occurrence of any of the following events: (a) the failure or neglect of the other party to observe, keep, or perform any of the material covenants, terms or conditions of this Master Agreement or any License Agreement where such non-performance is not fully remedied by the breaching party within thirty (30) days of the non-breaching party written notice; or (b) any breach of Section 2.2, 2.3, 2.4, 2.6 or any material breach of Section 14 hereof (effective immediately upon written notification); or (c) the filing of a petition for the other Party's bankruptcy which is not discharged within sixty (60) days, whether voluntary or involuntary, or an assignment of the other Party's assets made for the benefit of creditors, or the appointment of a trustee or receiver to take charge of the other Party's business for any reason, or the other Party becoming insolvent or ceasing to conduct business in the normal course. Further, unless expressly provided to the contrary in an ECO or Product Schedule, Artisan Components shall have the right, in its sole discretion, to terminate this Master Agreement and any or all License Agreements and the licenses granted hereunder, if Customer fails or neglects to pay Artisan Components any sums or amounts due, individually, or in the aggregate in excess of [***], under any License Agreement in a timely manner where such delinquency is not fully corrected within thirty (30) days after Artisan Components' written demand. By way of clarification, a decision by either party not to renew the maintenance and support agreement (Appendix B-3 to the Product Schedule) will not result in termination of this Master Agreement or of any License Agreement.

9.2 The provisions of Sections 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, and 21 shall survive the expiration and any termination of this Master Agreement and any License Agreement; however, the provisions of Section 9.3 survive as described in that Section, and obligations under Section 10, 11 and 19 survive only to the extent that the obligation is based on events that occurred prior to termination.

9.3 If Artisan Components exercises its right to terminate this Master Agreement due to Customer's breach, then upon the effective date of termination, Customer shall cease to Use and shall either destroy or return to Artisan Components all of the Licensed Product(s), Licensed Integrated Circuits in Customer's possession or under Customer's direct control (specifically excluding non-consigned inventory held by independent distributors), Documentation, and copies thereof, together with Customer's written certification by a duly authorized officer, that the Licensed Product(s), Licensed Integrated Circuits in Customer's possession or under Customer's direct control, and Documentation and all copies thereof are no longer in Use and have been returned to Artisan Components or destroyed.

9.4 Upon the effective date of termination of the Master Agreement by Artisan Components, Customer shall make prompt payment in full to Artisan Components for all amounts then due plus the present value (discounted at the lesser of: (a) the then current one year U.S. Treasury Bill Rate and (b) the one year U.S. Treasury Bill Rate as of the License Agreement Effective Date) of the unpaid balance of the License and Customization Service Fees as set forth in Appendix B-1 to the Product Schedule, but not unearned royalties.

9.5 The foregoing subsections notwithstanding, for a period of [***] after the termination by Customer pursuant to Section 9.1, or expiration of this Master Agreement, Customer and its Affiliates shall have the right to distribute and manufacture Licensed Integrated Circuits, based on Designs of Customer's customers', if such Designs or previous versions thereof which do not constitute different products were reduced to GDSII format prior to or within [***] following the termination or expiration of this Master Agreement, and provided that Artisan Components is continued to be paid any fees associated with such Designs.

9.6 Designs. The foregoing subsections notwithstanding, for a period of eighteen (18) months after the termination by Artisan Components pursuant to Section 9.1, Customer and its Affiliates shall have the right to distribute and manufacture Licensed Integrated Circuits, based on Designs of Customer's customers', if such Designs or previous versions thereof which do not constitute different products were reduced to GDSII format prior to or within 90 days following the termination or expiration of this Master Agreement, and provided that Artisan Components is continued to be paid any fees associated with such Designs.

9.7 Termination of this Master Agreement or any License Agreement under this Section 9 shall be in addition to, and not a waiver of, any remedy at law or in equity available to a Party arising from the other Party's breach of this Master Agreement or any License Agreement.

10. WARRANTIES

10.1 Artisan Components [***] and [***] the Licensed Products are and will be [***] by Artisan Components, that it has [***] the [***] hereunder and [***] the Licensed Products as set forth herein. Artisan Components further [***] and [***] that as of the Effective Date there are no [***] Artisan Components relating to any [***] to be used in connection with or imbedded within any Licensed Product. As Customer's [***] for any [***] of this [***]; Artisan Components will [***] Customer in accordance with [***].

10.2 Upon the execution of this Master Agreement and the Product Schedule, Artisan Components warrants for a period of ninety (90) days from the date of delivery that the Licensed Product(s) as delivered by Artisan Components shall be free from defects in media and shall substantially conform to the material specifications of the electronic documentation, described in Appendix A-1 to the Product Schedule. Artisan Components does not warrant that the use of the Licensed Product(s) will be uninterrupted or error free. In the event of any nonconformance of the Licensed Product, Customer shall promptly notify Artisan Components in writing, and provide Artisan Components with evidence and documentation which reproduces the claimed error and resultant output from the execution or use of such code or data. Artisan Components' sole obligation and Customer's exclusive remedy under this warranty shall be limited to use of Artisan Components' commercially reasonable efforts to correct such defects and provide the corrections to Customer. Artisan Components' warranty obligations under this Master Agreement will not apply to failure by the Licensed Product(s) to comply with the limited warranty herein due to accident, neglect, abuse, acts of God or misapplication, modifications by Customer or due to models, flows, design tools or any other information provided by Customer to Artisan Components under this Master Agreement or the License Agreement. Artisan Components also warrants that any services it provides under this Master Agreement or any License Agreement will be performed in a professional manner, and Customer and Artisan Components agree that Customer's sole remedy, and Artisan Components' sole liability for any breach of the foregoing warranty is that, on Customer's written request, Artisan Components will re-perform the service in a manner that does comply with the warranty. Further, any silicon debugging or product engineering provided by Artisan Components pursuant to Section 3.2 above is provided "AS IS."

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

10.3 EXCEPT AS SPECIFICALLY SET FORTH IN THIS SECTION 10, ARTISAN COMPONENTS AND ITS LICENSORS DO NOT MAKE ANY EXPRESS, IMPLIED OR STATUTORY WARRANTIES, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, TRADE USAGE OR TRADE PRACTICE.

11. INDEMNIFICATION BY ARTISAN COMPONENTS

11.1 Artisan Components shall, at its own expense, defend or at its option, settle any claim, suit or proceeding brought by a third party against Customer or its officers, directors or employees for direct infringement of any valid Intellectual Property right (other than patent right) or [***] patent of such third party, by virtue of Customer's authorized Use of any of the Licensed Product(s) pursuant to the terms of the License Agreement, and shall pay any settlement amounts or damages finally awarded in such claim, suit or proceeding; provided that Customer: (a) promptly notifies Artisan Components in writing of such claim, suit or proceeding (provided, however, that Customer's failure to give prompt notice shall not reduce Artisan Components' obligations set forth in this section except to the extent that Artisan Components has been prejudiced thereby), (b) gives Artisan Components sole control over the defense and/or settlement of such claim, suit or proceeding; and (c) reasonably cooperates and provides all available information, assistance and authority to defend or settle the claim, suit or proceeding. Artisan Components shall not enter into any settlement or consent decree that results in an admission of liability by Customer or the entry of injunctive relief against Customer without Customer's prior written consent, which shall not be unreasonably withheld or delayed. Artisan Components shall not be liable for any costs, expenses, damages or fees incurred by Customer in defending such action or claim unless authorized in advance in writing by Artisan Components. Furthermore, Artisan will have no liability under this Master Agreement or the License Agreement for any infringement claim to the extent it (i) is based on modification of a Licensed Product other than by Artisan Components, with or without authorization if such infringement would have been avoided by the use of an unmodified version of the Licensed Products; (ii) results from failure of Customer to use an updated version of an unmodified version of the Licensed Product; (iii) is based on the combination or use of a Licensed Product with any other software, hardware, data, program or device not provided by Artisan Components if such infringement would have been avoided by the use of the Licensed Products alone; or (iv) results from compliance by Artisan Components with designs, plans or specifications furnished by Customer.

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

11.2 Any action to be brought to prevent or enjoin any third party from infringement of any patent, copyright or other proprietary rights of Artisan Components with respect to the Licensed Product(s) shall be brought exclusively by Artisan Components or Artisan Components' designee, in Artisan Components' sole discretion and as between Customer and Artisan Components, at Artisan Components' sole cost and expense.

11.3 If the Licensed Product(s) is, or in Artisan Components' opinion is likely to become the subject of a claim, suit, or proceeding alleging infringement, Artisan Components may, and in the event the Licensed Product(s) is held to infringe any third party Intellectual Property Right, Artisan Components shall: (a) procure, at no cost to Customer, the right to continue Usage of the Licensed Product; (b) replace or modify the Licensed Product, at no cost to Customer, to make it non-infringing, provided that substantially the same function is performed by the replacement of modified Licensed Product(s), or (c) if the right to continue Usage cannot be reasonably procured for Customer or the Licensed Product(s) cannot be replaced or modified to make it non-infringing, terminate the license of such Licensed Product(s), remove the Licensed Product(s) and grant Customer refund credit on the License and Customization Service Fees attributable to such Licensed Product(s) as depreciated on a straight-line [***] basis.

11.4 The foregoing states Artisan Components' sole obligations and entire liability with respect to any claimed infringement of the Licensed Product(s) of any Intellectual Property or other rights of any third party.

12. LIMITATION OF LIABILITY

12.1 EXCEPT FOR ANY UNAUTHORIZED (OR UNREPORTED) USE, REPRODUCTION OR DISTRIBUTION, IN WHOLE OR IN PART, OF ANY LICENSED PRODUCT OR ANY INTELLECTUAL PROPERTY RIGHTS CONTAINED THEREIN, AND EXCEPT FOR DAMAGES ARISING FROM A BREACH OF THE OBLIGATIONS OF CONFIDENTIALITY UNDER [***], OR FOR OBLIGATIONS UNDER [***] OR [***], IN NO EVENT WILL EITHER PARTY OR ITS LICENSORS OR SUPPLIERS BE LIABLE FOR ANY LOSS OR DAMAGE TO REVENUES, PROFITS, OTHER ECONOMIC LOSS OR GOODWILL OR COSTS OF REPLACEMENT GOODS OR SERVICES OR ANY OTHER SPECIAL, INCIDENTAL, EXEMPLARY, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY KIND, ARISING OUT OF OR RELATING TO THIS MASTER AGREEMENT, THE LICENSE AGREEMENT, LICENSED INTEGRATED CIRCUITS OR THE LICENSED PRODUCT(S), OR RESULTING FROM ITS PERFORMANCE OR FAILURE TO PERFORM PURSUANT TO THE TERMS OF THIS MASTER AGREEMENT OR THE LICENSE AGREEMENT OR RESULTING FROM THE FURNISHING, PERFORMANCE, DELAY IN DELIVERY, OR USE OR LOSS OF USE OF ANY LICENSED PRODUCT(S) OR OTHER MATERIALS DELIVERED TO CUSTOMER HEREUNDER, HOWEVER CAUSED AND WHETHER BASED IN BREACH OF CONTRACT, BREACH OF WARRANTY, TORT (INCLUDING NEGLIGENCE) OR ANY OTHER THEORY OF LIABILITY. THE FOREGOING LIMITATIONS SHALL APPLY EVEN IF THE OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY STATED HEREIN.

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

12.2 [***] and its licensors' and suppliers' aggregate liability to the [***] under any provision of this Master Agreement and the License Agreement shall be limited to the total License and Customization Service Fees actually paid and License and Customization Service Fees payable by Customer to Artisan Components for the Licensed Product(s) in question. Notwithstanding the foregoing, the limitation shall be [***] in the aggregate for liability resulting from unauthorized (or unreported) use, reproduction or distribution, in whole or in part, of any Licensed Product or any Intellectual Property rights contained therein, a party's breach of [***] or a party's obligations under [***] or [***]. The existence of more than one claim will not enlarge or extend the limits set forth in this [***].

13. RELEASE OF PERFORMANCE INFORMATION

Customer shall not distribute, externally or to third parties, any reports or statements that directly compare the speed, functionality or other performance results of the Licensed Product(s) with any other products of Customer or any third party that are similar to the Licensed Product(s) without the prior written approval of Artisan Components.

14. PUBLICITY; CONFIDENTIALITY

14.1 Except to the extent required by applicable law, neither party shall announce or publicly disclose the terms or conditions of this Master Agreement or the License Agreement without prior written approval from the other party; provided, however, that either party shall have the right to publicly disclose the following: (a) that Customer is a customer of Artisan Components, (b) that Artisan Components has provided the Licensed Product(s) to Customer and that the Licensed Product(s) were Used in the development of the Licensed Integrated Circuit, or (c) a product description of the Licensed Product(s) as contained in Artisan Components' standard product literature. In addition, either party may issue a press release related to this Master Agreement or License Agreement upon the other party's prior written approval (such approval not to be unreasonably withheld or delayed). Once approved, the statements in a press release remain approved until approval is specifically revoked, in writing.

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

14.2 The parties acknowledge that by reason of their relationship to each other hereunder, each may have access to certain information and materials concerning the other's business, plans, customers, technology and products that is confidential to that other party. Such information and materials will be marked as "Confidential" or "Proprietary" or otherwise clearly identified as confidential or proprietary ("Confidential Information"). In the event such disclosure is initially oral or visual and not reduced to writing, it shall be identified as confidential at the time of disclosure and summarized or identified in a written document, which shall be marked with an appropriate legend such as "Confidential" or "Proprietary" and provided to the other party within thirty (30) days following such disclosure. Notwithstanding the foregoing, the Licensed Product(s) are Confidential Information of Artisan Components regardless of whether they are marked confidential or proprietary and/or summarized in a writing. Each party agrees that except as may otherwise be stated herein, it shall not use, except to perform its obligations and/or to exercise its rights and licenses specified under this Master Agreement or the License Agreement, nor disclose to any third party (except as provided in section 2 of this Master Agreement and the License Agreement), any such Confidential Information revealed to it by the other party. Each party shall take reasonable precautions to protect the confidentiality of such information, which in any event will be no less than what it takes with respect to its own similar confidential information.

14.3 Information shall not be deemed Confidential Information hereunder if such information:

(I) is known to the recipient at the time of disclosure;

(II) hereafter becomes known (independently of disclosure by the providing party) to the recipient directly or indirectly from a source other than one having an obligation of confidentiality to the providing party;

(III) becomes publicly available or otherwise ceases to be secret or confidential, except through a breach of this Master Agreement or the License Agreement by the recipient;

(IV) was independently developed by the recipient without use of the disclosing party's Confidential Information;

(V) is required to be disclosed pursuant to any statutory or regulatory authority, provided the disclosing party is given prompt notice of such requirement and the scope of such disclosure is limited to the extent possible;

(VI) is required to be disclosed by a court order, provided the disclosing party is given prompt notice of such order and provided the opportunity to contest it; or

(VII) is reasonably necessary to disclose in order to enforce this Master Agreement or the License Agreement.

14.4 As to each item of Confidential Information, the provisions of this Section 14 will continue for three (3) years following first receipt of such information, except for the Licensed Product(s), for which the provisions of this Section 14 will continue for five (5) years following any termination or expiration of the License Agreement.

15. GOVERNING LAW

This Master Agreement and the License Agreement shall be governed by and construed in accordance with the laws of the State of California, without regard to the conflict of laws provisions thereof. Neither this Master Agreement nor the License Agreement will be governed by the United Nations Convention of Contracts for the International Sale of Goods, the application of which is hereby expressly excluded.

16. [***]

16.1 Neither this Master Agreement nor the License Agreement nor any rights or obligations hereunder or thereunder, in whole or in part, shall be [***] by operation of law or otherwise, or [***] except upon [***] of Artisan Components. [***] Any unauthorized attempt by Customer to [***] this Master Agreement or the License Agreement or any rights or obligations hereunder or thereunder shall be null and void. Artisan Components shall [***] this Master Agreement or any License Agreement [***]. Notwithstanding the foregoing, Artisan Components agrees that this Master Agreement, any License Agreement and all of Customer's rights and interests hereunder or there-under, [***] by way of a first ranking fixed pledge and charge by Customer for the benefit of [***] and [***] to secure debt financing made available to Customer in connection with the construction of Customer's new wafer fab facility. Subject to the foregoing, this Master Agreement and any License Agreement will be binding upon and inure to the benefits of the parties hereto[***].

17. NOTICE

Any notices required to be given pursuant to this Master Agreement or the License Agreement shall be in writing, sent via certified mail, return receipt requested, express courier, or by facsimile (a confirmed copy of which to be sent promptly by mail to addressee) to the address of Artisan Components or Customer as set forth below or to such other address as may be specified from time to time by notice in writing, and such notice shall be deemed to have been received on the earlier of (a) the date when actually received or (b) if by facsimile, when the sending party shall have received a facsimile confirmation that the message has been received by the receiving party's facsimile machine.

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

If to Artisan Components:

Artisan Components, Inc.
141 Caspian Court
Sunnyvale, CA 94089
[***]
[***]
[***]

With a copy to:

[***], Artisan Components, Inc.

at the same address

If to Customer:

Tower Semiconductor Ltd.
P.O. Box 619
Migdal Haemek
23105 Israel
Attn: Chief Executive Officer
Telephone: +972-(4)-650-6611
Facsimile: +972-(4)-654-7788

18. SEVERABILITY AND WAIVER

18.1 The invalidity or unenforceability of any particular provision of this Master Agreement or License Agreement shall not affect the other provisions of this Master Agreement or the License Agreement, respectively, and shall be construed in all respects as if such invalid or unenforceable provisions were omitted.

18.2 The waiver by either party of any default or breach of this Master Agreement or the License Agreement shall not constitute a waiver of any other subsequent default or breach.

18.3 Failure or delay by either party in exercising any right or power hereunder shall not operate as a waiver of such right or power.

19. INDEMNIFICATION

19.1 Customer shall, at its own expense, defend or at its option, settle any claim, suit or proceeding brought by a third party against Artisan Components or its officers, directors or employees for (i) any product liability claim for death, personal injury or property damage caused by Modifications made to the Licensed Integrated Circuits by or on behalf of Customer; (ii) Customer's gross negligence or willful misconduct; and (iii) Artisan Components' authorized use of the Required Data, including any claim that the Required Data directly infringes any valid Intellectual Property right (other than patent right) or [***], patent of such third party. Customer shall pay any settlement amounts or damages finally awarded in such claim, suit or proceeding; provided that Artisan Components (a) promptly notifies Customer in writing of such claim, suit or proceeding (provided, however, that Artisan Components' failure to give prompt notice shall not reduce Customer's obligations set forth in this section except to the extent that Customer has been prejudiced thereby), (b) gives Customer sole control over the defense and/or settlement of such claim, suit or proceeding; and (c) reasonably cooperates and provides all available information, assistance and authority to defend or settle the claim, suit or proceeding. Customer shall not enter into any settlement or consent decree that results in an admission of liability by Artisan Components or the entry of injunctive relief against Artisan Components without Artisan Components' prior written consent, which shall not be unreasonably withheld or delayed. Customer shall not be liable for any costs, expenses, damages or fees incurred by Artisan Components in defending such action or claim unless authorized in advance in writing by Customer.

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

19.2 The Licensed Product(s) are not specifically developed or licensed for use in the planning, construction, maintenance, operation or other use of any nuclear facility, or for the flight, navigation or communication of aircraft or ground support equipment, or for weapons or munitions use, medical life support use or in any other inherently dangerous activity. Customer agrees that Artisan Components shall not be liable for any claims, losses, costs or liabilities arising from such use if Customer or its distributors or customers use the Licensed Product(s) for such applications.

20. ATTORNEYS' FEES

The prevailing party in any action to enforce the terms of this Master Agreement or the License Agreement shall be entitled to reasonable attorneys' fees and other costs and expenses incurred by it in connection with such action.

21. MISCELLANEOUS TERMS

21.1 The relationship of the parties hereto is that of independent contractors, and neither party is an employee, agent, partner or joint venturer of the other.

21.2 Except for payments due under the License Agreement by Customer, neither party shall have liability for its failure to perform its obligations under this Master Agreement or the License Agreement when due to circumstances beyond its reasonable control.

21.3 If Customer distributes the Front-End Views and/or Back-End Views, as authorized herein, to an agency, department, or other entity of the United States Government ("Government"), the Government's use, reproduction, release, modification, disclosure or transfer of the Licensed Product(s), or of any related documentation of any kind, including technical data, is restricted in accordance with Federal Acquisition Regulation ("FAR") 12.212 for civilian agencies and Defense Federal Acquisition Regulation Supplement ("DFARS") 227.7202 for military agencies. The Licensed Product(s) are commercial. The use of the Licensed Product(s) by any Government agency, department, or other entity of the Government, is further restricted in accordance with the terms of the License Agreement, or any modification hereto. Customer will affix the following legend before delivery to the Government of each of the Front-End Views and/or Back-End Views to be delivered to the Government:

Use, duplication, reproduction, release, modification, disclosure or transfer of this commercial product and accompanying documentation, is restricted in accordance with FAR 12.212 and DFARS 227.7202, and by a license agreement. Contractor/manufacturer is: Artisan Components, Inc., 141 Caspian Court, Sunnyvale, California 94089.

21.4 BOTH PARTIES ACKNOWLEDGE THAT THIS MASTER AGREEMENT INCLUDING THE EXHIBITS AND APPENDICES ATTACHED HERETO AND THE PRODUCT SCHEDULE, CONSTITUTE THE COMPLETE AND EXCLUSIVE STATEMENT OF THE MUTUAL UNDERSTANDING OF THE PARTIES AND SUPERSEDES AND CANCELS ALL CONFLICTING TERMS AND CONDITIONS AND ALL PREVIOUS AND CONTEMPORANEOUS WRITTEN AND ORAL AGREEMENTS AND COMMUNICATIONS RELATING TO THE SUBJECT MATTER HEREOF, INCLUDING ANY TERMS AND CONDITIONS THAT MAY BE INDICATED IN ANY CUSTOMER PURCHASE ORDER. NEITHER THIS MASTER AGREEMENT NOR THE LICENSE AGREEMENT SHALL BE MODIFIED, SUPPLEMENTED, QUALIFIED, OR INTERPRETED BY ANY TRADE USAGE OR PRIOR COURSE OF DEALING NOT MADE A PART OF THIS MASTER AGREEMENT OR THE LICENSE AGREEMENT BY ITS EXPRESS TERMS. NEITHER THIS MASTER AGREEMENT NOR THE LICENSE AGREEMENT SHALL BE MODIFIED OR AMENDED EXCEPT IN WRITING AND EXECUTED BY DULY AUTHORIZED REPRESENTATIVES OF BOTH PARTIES.

BOTH PARTIES ACKNOWLEDGE THAT THEY HAVE READ THIS MASTER AGREEMENT, UNDERSTAND IT AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS AS EVIDENCED BY THEIR SIGNATURES BELOW.

ARTISAN COMPONENTS, INC.

By: _____
Signature of an Officer of the Corporation

Name: _____
Printed name of the Signing Officer

Title: _____

Date: _____

CUSTOMER: TOWER SEMICONDUCTOR, LTD.

By: _____
Signature of an Authorized Representative

Name: _____
Printed name of the Authorized Representative

Title: _____

Date: _____

EXHIBIT A
TO
MASTER AGREEMENT

ENGINEERING CHANGE ORDER
(ECO) REQUEST FORM

PRODUCT SCHEDULE NO. ____
REQUEST NO. ____

Customer: Date:
Requestor: Phone:
E-mail Address: Fax:
Project:

This Engineering Change Order Form (ECO) is to be used as an official notification to Artisan Components of any changes in design or specification made to a project. Once this form has been received, Artisan Components will evaluate the schedule and cost impacts of these changes and inform you of the results.

Description of Requested Change:
.....
.....
.....
.....
.....
.....
.....
.....

Requestor's Signature: Date:
Engineering Manager's Approval: Date:

EXHIBIT B
TO
MASTER AGREEMENT

ENGINEERING CHANGE ORDER
(ECO) RESPONSE FORM

PRODUCT SCHEDULE NO. ____
REQUEST NO. ____

Customer:
Requestor: Phone:
E-mail Address: Fax:
Project:

Artisan Components has evaluated your attached ECO request, its impact on your schedule and any additional charges associated with the request. This evaluation is described below:

In summary, this change will:

- * Add ____ working days to the schedule
- * Will not impact the schedule
- * Require an increase/decrease in the cost of \$____ additional charges, payable upon the following terms: [***] upon Artisan Project Management approval, net [***], and [***] upon Customer's receipt of the ECO delivery, net [***].
- * Will not require any of your project

Please sign this form to acknowledge that you understand the impact of your requested changes. Signing the Refusal indicates that you DO NOT authorize Artisan Components to proceed with the requested change(s). Signing the Acceptance authorizes Artisan Components to proceed with these changes. If additional costs are indicated, then the buyer's signature is required. This form must be signed and returned to Artisan Components by _____.

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

Requestor's Refusal: Date:
Requestor's Acceptance: Date:
Buyer's Approval: Date:
Artisan Sales Approval: Date:
Artisan Project Management Approval: Date:

EXHIBIT C

TO

MASTER AGREEMENT

PRODUCT SCHEDULE NO. 1

This PRODUCT SCHEDULE Number One (this "Product Schedule") is made in connection with that certain Master Agreement, Number _____, with an Effective Date of _____ (the "Master Agreement"), by and between ARTISAN COMPONENTS, INC., a Delaware corporation, with its principal place of business at 141 Caspian Court, Sunnyvale, California 94089-1210 (hereinafter referred to as "Artisan Components"), and Tower Semiconductor Ltd., a company organized under the laws of Israel with its principal place of business at Ramat Gavriel Industry Zone, Migdal Haemek, 23105 Israel (hereinafter referred to as "Customer"). This Product Schedule is made effective as of _____ (the "License Agreement Effective Date").

RECITALS

The parties desire to license certain Licensed Product(s) described herein pursuant to the terms and conditions of the Master Agreement and this Product Schedule.

AGREEMENT

1. LICENSED PRODUCT(S).

(A) LICENSED PRODUCT(S). The parties agree that the terms and conditions of the Master Agreement are incorporated herein by this reference, and Appendix A-1 to this Product Schedule is added to and made a part of this Product Schedule. The Licensed Product(s) described in Appendix A-1 are Licensed Product(s) for purposes of the Master Agreement and this Product Schedule. Appendix A-1 sets forth the Deliverables and Delivery Schedule relating to the Licensed Product(s).

(B) PAYMENT FOR LICENSED PRODUCT(S). The License and Customization Service Fees, Royalties and Maintenance Fees for the Licensed Product(s) are set forth in Appendix B-1 to this Product Schedule. Appendix B-1 is added to and made a part of this Product Schedule.

(C) TECHNICAL SUPPORT AND MAINTENANCE. Artisan Components will provide Customer with the technical support and maintenance described in Appendix C-1 to this Product Schedule for the Licensed Product(s). Appendix C-1 is added to and made a part of this Product Schedule.

2. LICENSE AGREEMENT TERM. This License Agreement is effective as of the License Agreement Effective Date and shall remain in full force and effect for a period of seven (7) years, unless earlier terminated as provided in the Master Agreement. Unless earlier terminated as provided in the Master Agreement, the License Agreement will automatically renew at the end of each term for consecutive one (1) year renewal periods, unless either party notifies the other at least [***] prior to the end of the then current term that it does not desire the License Agreement to renew for another year.

3. GENERAL. Unless otherwise defined in this Product Schedule, capitalized terms used in this Product Schedule shall have the same meaning as set forth in the Master Agreement.

Accepted and Agreed To:

ARTISAN COMPONENTS, INC.

By: _____
Signature of an Officer of the Corporation

Name: _____
Printed name of the Signing Officer

Title: _____

Date: _____

CUSTOMER

By: _____
Signature of an Authorized Representative

Name: _____
Printed name of the Authorized Representative

Title: _____

Date: _____

- - - - -
[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

APPENDIX A-1

TO

PRODUCT SCHEDULE NO. 1

LICENSED PRODUCT(S), DELIVERABLE(S), TARGET DELIVERY DATES AND REQUIRED DATA

I. LICENSED PRODUCT(S) (all optimized for Customer's 0.18um process).

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***]

[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

II. DELIVERABLES

FOR STANDARD CELLS AND I/O'S: Standard Cell and I/O CAD Deliverables - EDA
Package 3.0

DESIGN PHASE	TOOL	VENDOR	TOOL VERSION	FILES PROVIDED BY ARTISAN	VIEW VERSION
VERILOG SIMULATION. (UNIT DELAY ONLY)	[***]	[***]	[***]	.v	--
	[***]	[***]	[***]	.v	--
	[***]	[***]	[***]	.v	--
	[***]	[***]	[***]	.v	--
SDF COMPATIB.	--	--	--	--	[***]
VHDL/VITAL SIMULATION	[***]	[***]	[***]	[***]	--
	[***]	[***]	[***]	[***]	--
	[***]	[***]	[***]	[***]	--
SDF COMPATIB.	--	--	--	--	[***]
SYNTHESIS	[***]	[***]	[***]	[***]	--
	[***]	[***]	[***]	[***]	--
	[***]	[***]	[***]	[***]	--
PHYSICAL SYNTHESIS	[***]	[***]	[***]	[***]	--
STATIC TIMING / DELAY CALCULATION	[***]	[***]	[***]	[***]	--
	[***]	[***]	[***]	[***]	[***]
SCHEMATIC ENTRY (FOR REFERENCE PURPOSES ONLY)	[***]	[***]	[***]	[***]	--
POWER EST./OPT.	[***]	[***]	[***]	[***]	--
PLACE&ROUTE	[***]	[***]	[***]	[***]	[***]
	[***]	[***]	[***]	[***]	[***]
	[***]	[***]	[***]	[***]	--
				[***]	--
				[***]	--
				[***]	--
				[***]	--
				[***]	--
				[***]	[***]
VERIFICATION (DRC, LVS)	[***]	[***]	[***]	[***]	[***]
				CDL netlist	--

FOR STANDARD CELLS, CALIBRE DRC AND LVS SHALL BE PROVIDED BY CUSTOMER.

FOR MEMORIES: Memories CAD Deliverables - EDA Package 3.0

[**] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

DESIGN PHASE	TOOL	VENDOR	TOOL VERSION	FILES PROVIDED BY ARTISAN	VIEW VERSION
VERILOG SIMULATION (UNIT DELAY ONLY).	[***]	[***]	[***]	[***]	--
	[***]	[***]	[***]	[***]	--
	[***]	[***]	[***]	[***]	--
	[***]	[***]	[***]	[***]	--
SDF COMPATIB.	--	--	--	--	[***]
VHDL/VITAL SIMULATION	[***]	[***]	[***]	[***]	--
	[***]	[***]	[***]	[***]	--
	[***]	[***]	[***]	[***]	--
SDF COMPATIB.	--	--	--	--	[***]
SYNTHESIS	[***]	[***]	[***]	[***]	--
PHYSICAL SYNTHESIS	[***]	[***]	[***]	[***]	--
STATIC TIMING / DELAY CALCULATION	[***]	[***]	[***]	[***]	--
	[***]	[***]	[***]	[***]	[***]
POWER EST./OPT.	[***]	[***]	[***]	[***]	--
PLACE&ROUTE	[***]	[***]	[***]	[***]	[***]
	[***]	[***]	[***]	[***]	[***]
	[***]	[***]	[***]	[***]	[***]
VERIFICATION (DRC, LVS)	[***]	[***]	[***]	[***]	[***]
				[***]	--

[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

III. TARGET DELIVERY DATES

PHASE I

PRODUCTS	TARGET DELIVERY DATE
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

PHASE II

PRODUCTS	TARGET DELIVERY DATE
[***]	[***]

* ARO means the later of: executed Agreement, purchase order, and final versions of all Required Data received from Customer.

** Artisan Components shall issue a written report to Customer summarizing the results of such tests. The written report shall be provided to Customer within 30 days after the Test Chip is provided to Artisan Components or at a date mutually agreed in advance by the parties as shown in the appropriate Product Schedule. If the Artisan Components test suites indicate a functionality problem arising from either the optimized library or the applicable Customer Required Data, the parties shall negotiate in good faith to determine the corrective action prior to release of such report to third parties.

IV. REQUIRED DATA

RECEIVABLE	FORMAT
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

APPENDIX B-1

TO

PRODUCT SCHEDULE NO. 1

LICENSE AND CUSTOMIZATION SERVICE FEES, ROYALTIES, TECHNICAL SUPPORT AND MAINTENANCE FEES, AND VERIFICATION PROCEDURE

I. LICENSE AND CUSTOMIZATION SERVICE FEES

For each Licensed Product listed herein, [***] of the Fees paid are for License Fees and [***] of the Fees are paid for Customization Services Fees. Of the overall License Fees and Customization Service Fees set forth in this Exhibit B-1 (the "License and Customization Service Fees"), [***] are paid for License Fees and [***] are paid for Customization Service Fees.

PHASE I

PRODUCTS	FEES
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
TOTAL FEES FOR PHASE I [***]	

PHASE II

PRODUCTS	FEES
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
TOTAL FEES FOR PHASE II [***]	

[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

II. ROYALTIES

Customer further shall pay to Artisan Components the following running royalties with respect to all Wafers:

[***] of Net Revenue from Wafer*

* "Net Revenue From Wafer" means the gross consideration (whether in cash or kind) invoiced by Customer from sales of Wafers less the following only as applicable to the Wafer sales transaction (i) separately itemized normal and customary rebates, and cash and trade discounts actually taken, (ii) separately itemized sales, use and/or other excise taxes or duties actually paid, (iii) [***], (iv) separately itemized insurance costs and outbound transportation charges prepaid or allowed, (v) separately itemized import and/or export duties actually paid, (vi) separately itemized amounts allowed or credited due to returns, and (vii) [***]. In addition, when a Wafer is sold in a packaged or tested form, the gross consideration (whether in cash or kind) invoiced by Customer for the purposes of calculating the Net Revenue From Wafer shall be less the costs of packaging and testing. In the event a Wafer is sold to either an Affiliate or a third party from whom Customer purchases the Wafer or any product derived from the Wafer (such as a packaged and tested IC), the "Net Revenue from Wafer" shall be deemed to be the greater of (x) the Net Revenue From Wafer as calculated above; and [***].

III. TECHNICAL SUPPORT AND MAINTENANCE FEES

The Annual Maintenance Fee for the first year is [***], and the renewal rate for subsequent years is [***]. As set forth in Appendix C-1 to the Product Schedule, the first year of annual maintenance begins ninety (90) days after delivery of the applicable Licensed Product(s) ("Maintenance Commencement Date") and ends one (1) year later. The Annual Maintenance Fee is due in full for the initial one (1) year term on or before the Maintenance Commencement Date. Thereafter, the Annual Maintenance Fee shall be due and payable in full on or before the beginning date of the consecutive one (1) year renewal term for which payment is due.

- - - - -
[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

IV. RESTRICTED CREDITS MAY ACCRUE FOR NEW LICENSE AND CUSTOMIZATION SERVICE FEES APPLICABLE TO NEW/ADDITIONAL LICENSED PRODUCT(S)

Artisan Components will accrue restricted credits ("Restricted Credits") for Customer based on royalty fees paid to Artisan Components when due hereunder as follows. [***] of a Restricted Credit will accrue for each [***] of royalty fees paid to Artisan Components when due hereunder. One Restricted Credit will be applied by Artisan Components only towards [***] of new License Fees and/or development fees for such products and/or services (other than the License and Customization Service Fees initially set forth in this Appendix B-1), and NOT royalty fees, for new/additional Licensed Product(s) ("New Orders") ordered by Customer under a subsequent Product Schedule (other than this Product Schedule) or ECO, if any; provided, however, that (i) the maximum amount of Restricted Credits to accrue for any process technology (including process derivatives) and be applied against New Orders may not exceed the total amount of Licensed Product(s) (Development Fees / License Fees/ Services Fees) orders placed by Customer for such process (including process derivatives)¹ and (ii) the Restricted Credits may be applied only against New Orders set forth in a firm order from Customer within [***] of the date the Restricted Credits were accrued (date of accrual shall be the date Artisan Components receives the royalty fees that earned the Restricted Credits). The foregoing does not prohibit Customer from applying Restricted Credits earned from one process to purchases of products for another process. Restricted Credits have no cash value or refund value, and they may not be used for any purpose except as specifically set forth above as a credit to be applied by Artisan Components and authorized by Customer towards New Orders in accordance with all of the above. Any Restricted Credits which are not applied by Artisan Components towards New Orders as set forth above, for any reason, shall be deemed void.

V. VERIFICATION PROCEDURE

DRC VERIFICATION FOR MEMORY GENERATORS

Artisan and Customer shall agree in writing to use a specific version of a [***] and runset for validating the memory generators listed above before Artisan commences work hereunder. Approximately [***] after the start of this project, Artisan will provide Customer with Artisan's quality assurance instance list. At least [***] prior to the intended delivery date, Customer may provide Artisan a list of up to [***] additional instances per generator (the "Instances") that it wishes to subject to DRC verification.

Approximately, [***] prior to a product's intended delivery date of a memory generator deliverable, Artisan will provide Customer GDSII files of the Instances relevant to such deliverable (Prior to providing the GDSII files, Artisan shall have run DRC on the Instances using the agreed upon version of the DRC program and runset.). Within [***] of being provided an Instance, Customer will: (1) run DRC on the Instances using the agreed upon version of the DRC program and runset, and (2) report any DRC run errors, if any, to Artisan. If Customer identifies DRC run errors, then Artisan will work to correct such errors and redeliver the Instances to be retested by Customer (Artisan and Customer will repeat this process until such errors are corrected). If Customer reports to Artisan that there are no DRC run errors or does not report to Artisan, Artisan will proceed to finalize the memory generator deliverable for delivery to Customer.

[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

¹ For example, if the total amount of orders placed by Customer for the 0.18-micron process technology (including for Enhanced 0.18-micron) equals [***], then the maximum amount of Restricted Credits to accrue hereunder from royalties paid on the 0.18-micron Wafers is [***].

DRC VERIFICATION FOR STANDARD CELLS

Artisan and Customer shall agree in writing to use a specific version of a [***] and runset for validating the standard cell deliverables listed above before Artisan commences work hereunder.

Approximately, [***] prior to a product's intended delivery date of a standard cell deliverable, Artisan will provide Customer a GDSII file of the deliverable (Prior to providing the GDSII file, Artisan shall have run DRC on the GDSII file using the agreed upon version of the DRC program and runset.). Within [***] of being provided the GDSII file, Customer will: (1) run DRC on the GDSII file using the agreed upon version of the DRC program and runset, and (2) report any DRC run errors, if any, to Artisan. If Customer identifies DRC run errors, then Artisan will work to correct such errors and redeliver the GDSII file to be retested by Customer (Artisan and Customer will repeat this process until such errors are corrected). If Customer reports to Artisan that there are no DRC run errors or does not report to Artisan, Artisan will proceed to finalize the standard cell deliverables for delivery to Customer.

- - - - -
[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

APPENDIX C-1

TO

PRODUCT SCHEDULE NO. 1

TECHNICAL SUPPORT AND MAINTENANCE

This Support and Maintenance Appendix to License Agreement (this "Appendix"), upon due completion and execution hereof, serves to amend that certain License Agreement (the "License Agreement") comprised of that certain Master Agreement Number _____, dated _____, _____, and that certain Product Schedule Number _____, dated _____, _____, by and between Artisan Components, Inc., a California corporation, with its principal place of business at 141 Caspian Court, Sunnyvale, California 94089-1210 (hereinafter referred to as "Artisan Components"), and Tower Semiconductor Ltd., a company organized under the laws of Israel with its principal place of business at Ramat Gavriel Industry Zone, Migdal Haemek, 23105 Israel (hereinafter referred to as "Customer").

RECITALS

The parties desire to amend the License Agreement to provide for the following obligations and responsibilities of the parties relating to the provisioning of technical support and maintenance for the Licensed Product(s).

The parties agree the below terms and conditions are added to and made a part of the License Agreement:

APPENDIX

1. DEFINITIONS.

(A) "ERROR" shall mean a software problem or layout defect in the Licensed Product deliverables provided by Artisan Components which causes a failure of the Licensed Product(s) to substantially conform to the material specifications described in Appendix A-1 to the Product Schedule. Errors do not include (i) defects requiring silicon debugging and product engineering as described in Section 6 below, (ii) changes to Licensed Product(s) to work with new or different versions of EDA tools or operating systems, or (iii) changes to Licensed Product(s) to work with process rule changes (i.e., recharacterizations).

(B) "WORKAROUND" shall mean a change in the way Customer accomplishes a task using the Licensed Product, which may be of a temporary nature, to help avoid the Error.

(C) "SUPPORT LIAISON(S)" shall mean not more than [***] Customer technical support personnel authorized to contact Artisan Components for purposes of obtaining support and maintenance under the License Agreement.

(D) "UPDATE" means Update as defined in the License Agreement.

2. ARTISAN COMPONENTS' SUPPORT SERVICES.

Artisan Components will provide the following Support Services for the Licensed Product(s):

(A) Telephone Hotline Support: Artisan Components' technical services engineers will be available by telephone during Standard Hours (9:00 a.m. until 5:00 p.m. Pacific Local Time, Monday through Friday, excluding holidays on which Artisan Components is not open for business) to answer questions from the Support Liaison(s) about the installation and use of the Licensed Product(s), including aiding in the diagnosis and resolution of Errors in the Licensed Product(s). Artisan Components shall make reasonable commercial efforts to respond to all Technical Support telephone calls within [***] from the time they are received.

(B) E-mail and Facsimile ("Fax") support: Artisan Components' technical services engineers will be available by e-mail and Fax during Standard Hours for the same purposes as listed under Telephone Hotline Support. Artisan Components shall make reasonable commercial efforts to acknowledge by return e-mail all Technical Support requests via Fax or e-mail within [***] from the time they are received.

(C) Designated Contacts: Artisan Components will designate no more than [***] Artisan Components' technical employees to act as Technical Support Contacts between Customer and Artisan Components. This list may be modified from time to time by Artisan Components as is necessary in the conduct of its business. In addition, Artisan Components will designate a [***] responsible for priority escalation and ensuring Customer is satisfied with the level of support received.

3. CORRECTION OF LICENSED PRODUCT ERRORS.

(A) Artisan Components agrees to use commercially reasonable efforts to respond to reported Errors based upon the severity of the Error as follows:

(I) Critical Error. Customer is unable to use the Licensed Product(s) because of suspected or actual Errors in the Licensed Product(s). Artisan Components will respond to Critical Errors by assigning a technician to investigate the Error within [***] from the time the Customer reports the Error. Artisan Components will use commercially reasonable efforts to provide a Workaround or an Update to fix Critical Errors as soon as practical.

- - - - -
[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

(II) Moderate Error. Customer is able to use the Licensed Product(s) but is experiencing suspected or actual Errors in the Licensed Product(s) causing interruption of Customer's use of the Licensed Product(s). Artisan Components will respond to Moderate Errors by making commercially reasonable efforts to assign a technician to investigate the Error within [***] from the time the Customer reports the Error. Artisan Components will use commercially reasonable efforts to provide a Workaround as soon as practical, or to provide an Update to fix the Error in a [***] to [***] by [***].

(III) Minor Error. Customer is experiencing a suspected or actual Error in the Licensed Product(s) that limits some functionality of the Licensed Product(s) or the Customer's support personnel need assistance or information regarding the Licensed Product(s). Artisan Components will make a commercially reasonable effort to respond to requests for information within [***] and, if required, provide an Update within [***].

(B) With respect to Critical Errors, in the event Artisan Components cannot find a correction or Workaround to the Critical Error within a reasonable period of time, the parties will discuss having Artisan Components' engineer(s) visit Customer's facilities to investigate and find a solution. In such event, if the parties agree that the correction/Workaround may be more quickly achieved with Artisan Components' engineer(s) on-site at Customer's facilities, Artisan Components will, at its expense, send one or more engineers to Customer's facilities as reasonably necessary to investigate and find a solution to the Critical Error(s). If it is later found that such Critical Error is not attributable to the Licensed Product(s) in the form as delivered by Artisan Components (e.g., it is caused by third party software or modifications made by Customer, etc.), Customer agrees to reimburse Artisan Components for its travel, lodging and food expenses related to sending its engineers to Customer's site, plus the current engineering fees as described in Section 6 below.

4. UPDATES.

Artisan Components agrees to provide the Customer one copy of each new Update when such Update is commercially released by Artisan Components to its other existing customers, or, if earlier, when such Updates are prepared hereunder for Customer and in Artisan Components' discretion are ready for release to Customer. Artisan Components shall be obligated hereunder to support only the then-current Licensed Product(s) and, for a period of [***] following the date of release of the then-current Licensed Product(s), the immediately preceding Update of the Licensed Product(s). Any and all Updates provided to Customer hereunder (including but not limited to Error corrections) are part of the Licensed Product(s) and subject to all the terms and conditions of the License Agreement.

- - - - -
[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

5. MAINTENANCE AND SUPPORT RESPONSIBILITIES OF CUSTOMER.

In addition to the payment obligations set forth herein, Customer shall be responsible for the following:

(A) Customer will maintain a list of no more than [***] who will act as Support Liaison(s) between Customer and Artisan Components. Support Liaison(s) shall be knowledgeable in the installation and use of the Licensed Product(s). This list of Support Liaison(s) may be modified by Customer as is necessitated by employee turnover and reassignments.

(B) Support Liaison(s) will promptly report Errors in the Licensed Product(s) as they are discovered and will make good faith efforts to analyze problems and recommend Workarounds.

(C) Customer will implement the Workarounds and/or Updates that Customer accepts promptly. Customer acknowledges that Artisan Components shall not be required to provide support hereunder to the extent the support issue has been addressed without material loss of functionality in a Workaround and/or Update that Customer has not implemented.

(D) Customer will provide sufficient information and assistance to Artisan Components in order for Artisan Components to exercise its support obligations in this Appendix, including but not limited to providing sufficient information to enable Artisan Components to replicate the Error.

(E) In the event Customer desires Artisan Components to utilize third party software in Customer's possession to replicate an Error and provide support and/or maintenance hereunder, except as the parties may otherwise agree, Customer is responsible for obtaining and maintaining during the term of this Agreement, and Customer represents that it has obtained, all necessary rights and licenses, at Customer's expense, from the licensors of the third party software to authorize and enable Artisan Components to perform its obligations under this Agreement relating to the third party software used with the Licensed Product(s).

6. LIMITS OF SCOPE OF SUPPORT AND MAINTENANCE.

This Appendix sets forth the parties' rights and responsibilities with respect to Artisan Components' support and maintenance of the Licensed Product(s) and Updates thereto only during the period for which Customer pays for support as set forth herein. Except as may otherwise be specified in the Master License Agreement, License Agreement or other agreement entered into between the parties, Artisan Components has no obligation to provide Customer any support or maintenance services or Updates except as set forth under this Appendix.

[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

Notwithstanding anything to the contrary herein, the design and verification techniques for the Licensed Product(s) used by Artisan Components depend on the accuracy of models, flows and design tools, some of which are provided by Artisan Components' licensees and their target foundries. Due to practical limits on the accuracy of these models, flows and design tools, the fabricated silicon behavior may not always agree with that predicted. In these cases, upon Customer's request and upon a mutually agreed upon schedule, Artisan Components will assist the Customer in silicon debugging and product engineering at Artisan Components' then current standard hourly rate plus applicable expenses. Silicon debugging and product engineering do not fall under the support provisions set forth in this Appendix.

Furthermore, Artisan Components has no obligation to provide any support or maintenance for any modifications made to the Licensed Product(s) by or for Customer (other than by Artisan Components). If Customer reports an error or requests information relating to use of the Licensed Product, such reported error or information request must relate to use of the Licensed Product(s) in the form as provided by Artisan Components. If Artisan Components spends any time or resources on any error reports or information requests that are found attributable to Customer's modifications (or how to make modifications to) the Licensed Product, Artisan Components may charge Customer Artisan Components' then current hourly engineering fees and out of pocket expenses for all time and resources expended by Artisan Components on such matter(s). Customer will pay any such invoices [***] from the date of the invoice.

Artisan Components shall have no responsibility for analyzing or correcting errors in any third party software (other than to cooperate in providing information about the Licensed Product(s) to the Customer) or testing any third party software. Artisan Components shall not be responsible under this Appendix to modify Licensed Product(s) to operate with any new or different versions of third party software or any new third party software products.

7. TERM.

(A) Unless terminated as set forth hereunder, the maintenance and support to be provided hereunder shall be available on a yearly basis, with the initial yearly maintenance period beginning [***] after delivery of the Licensed Product(s) ([***) and ending one (1) year later. Thereafter, unless either party notifies the other party otherwise, the term of this Appendix shall automatically renew on the anniversary date of the Maintenance Commencement Date for consecutive one (1) year terms, unless either party notifies the other party at least forty-five (45) days prior to the end of the current Appendix term that it does not desire this Appendix to renew.

(B) This Appendix, which is made a part of the License Agreement, may be terminated as set forth in Section 9 of the Master Agreement (and this Appendix will terminate as part of any termination of the License Agreement). Termination of this Appendix does not necessarily mean termination of the Master License Agreement, but termination of the Master License Agreement will be considered to be termination of this Appendix.

- - - - -
[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIALITY.

8. SUPPORT AND MAINTENANCE PAYMENT.

(A) For each yearly period under the term of this Appendix, Customer must pay an annual support and maintenance fee ("Annual Maintenance Fee"). The Annual Maintenance Fee is due in full for the initial one (1) year term of this Appendix on or before the [***]. Thereafter, the Annual Maintenance Fee shall be due and payable in full on or before the beginning date of the consecutive one (1) year renewal term for which payment is due.

(B) The Annual Maintenance Fee will equal [***].

9. GENERAL.

Except as set forth herein, all terms and conditions of the License Agreement shall remain in full force and effect. Unless otherwise defined in this Appendix, capitalized terms used in this Appendix shall have the same meaning as set forth in the License Agreement.

Accepted and Agreed To:

ARTISAN COMPONENTS, INC.

By: _____
Signature of an Officer of the Corporation

Name: _____
Printed name of the Signing Officer

Title: _____

Date: _____

CUSTOMER

By: _____
Signature of an Authorized Representative

Name: _____
Printed name of the Authorized Representative

Title: _____

Date: _____

[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

APPENDIX D-1
TO
PRODUCT SCHEDULE

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[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED
SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

DRAFT DATED JUNE 24, 2002

EXHIBIT D
TO
MASTER AGREEMENT
FORM OF ESCROW AGREEMENT

[***]

- -----
[***] THE CONFIDENTIAL PORTION OF THIS AGREEMENT HAS BEEN OMITTED AND FILED
SEPARATELY WITH THE COMMISSION PURUSANT TO A REQUEST FOR CONFIDENTIALITY.

CERTIFICATION PURSUANT TO
18 U.S.C SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Tower Semiconductor Ltd. (the "Company") on Form 20-F for the year ended December 31, 2002 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Rafael Levin, Co-Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. the Report fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/S/ RAFAEL LEVIN
Rafael Levin
Co-Chief Executive Officer

April 14, 2003

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

1

CERTIFICATION PURSUANT TO
18 U.S.C SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Tower Semiconductor Ltd. (the "Company") on Form 20-F for the year ended December 31, 2002 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Yoav Nissan-Cohen, Co-Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. the Report fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/S/ YOAV NISSAN-COHEN
Yoav Nissan-Cohen
Co-Chief Executive Officer

April 14, 2003

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

2

CERTIFICATION PURSUANT TO
18 U.S.C SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Tower Semiconductor Ltd. (the "Company") on Form 20-F for the year ended December 31, 2002 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Amir Harel, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

3. the Report fully complies with the requirements of section 13(a) of the Securities Exchange Act of 1934; and
4. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/S/ AMIR HAREL
Amir Harel
Chief Financial Officer

April 14, 2003

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

