TOWER SEMICONDUCTOR LTD Form 6-K March 16, 2004

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FOR THE MONTH OF MARCH 2004

TOWER SEMICONDUCTOR LTD. (Translation of registrant's name into English)

Ramat Gavriel Industrial Park
P.O. Box 619, Migdal Haemek, Israel 23105
(Address of principal executive offices)

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

Form 20-F x Form 40-F

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

Yes No x

On March 9, 2004, the Registrant announced the Silicon migration of a new product performed by the Registrant's Authorized Design Center program. Attached hereto as Exhibit 1 is the press release relating to such announcement.

On February 23, 2004, the Registrant announced the expedited production of a mixed-signal integrated circuit for Smart Link. Attached hereto as Exhibit 2 is the press release relating to such announcement.

On February 20, 2004, the Registrant announced a partial exercise of the over-allotment option relating to the Registrant's follow-on public offering consummated in January 2004. Attached hereto as Exhibit 3 is the press release relating to such announcement.

On February 9, 2004, the Registrant announced the receipt of an environmental management certification. Attached hereto as Exhibit 4 is the press release relating to such announcement.

This Form 6-K is being filed and incorporated by reference in all effective registration statements filed by the Registrant under the Securities Act of 1933.

SIGNATURES

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

TOWER SEMICONDUCTOR LTD.

Date: March 15, 2004 By: /s/ Tamar Cohen

Tamar Cohen Corporate Secretary

Exhibit 1

Tower Semiconductor's Authorized Design Center Program Achieves a New Silicon Migration Success

Tuesday March 9, 7:30 am ET

Smaller Die Size, Improved Performance and Higher Yields Realized Through Tower's Partnership With Sycon Design

MIGDAL HAEMEK, Israel--(BUSINESS WIRE)--March 9, 2004-- Tower Semiconductor Ltd. (Nasdaq:TSEM - News; TASE:TSEM) today announced the new migration of a complex high-performance, custom integrated circuit device. The device was designed by Sycon Design Inc., a member of Tower Authorized Design Center program, for Comtech AHA Corporation (CAC), a wholly owned subsidiary of Comtech Telecommunications Corp. (Nasdaq:CMTL - News). Comtech AHA's forward-error correction circuit (AHA4541) is the first Comtech AHA order manufactured using Tower's 0.18-micron process technology in its Fab 2 production facility.

Sycon optimized the design for Tower's manufacturing process technology, achieving:

- o 30% die size reduction
- o Improvement of more than 100% in performance
- o Considerably higher product yields over previous devices manufactured by a leading foundry's 0.18-micron technology.

"We were faced with an accelerated development timetable and demanding functional requirements," said Bill Thomson, president of Comtech AHA Corporation. "The teamwork with Tower Semiconductor and Sycon Design allowed us to stay on schedule, and surpass our performance and quality targets with state-of-the-art technology and design expertise. The partnership for this migration strengthened our business relationship with Tower, which has seen more than 10 years of successful cooperation utilizing Tower's Fab 1 technologies."

The AHA4541 is designed for use in applications that require very high data rates, and has demonstrated bandwidth efficiency with stringent data reliability requirements.

"Our experienced design team has a proven track record of improving chip performance and delivering complex designs on time," said Sharon Zohar, president, chief executive officer and founder of Sycon Design. "As a Tower Authorized Design Center, we offer extensive experience with Tower's process flows and intellectual property, enabling quick, cost-effective physical design implementation with superior results."

"The first-time silicon success of the Comtech AHA demanding project, demonstrates the effectiveness of Tower's quality and reliability systems, incorporated with Tower's Authorized Design Center Program," said Doron Simon, vice president of marketing and president of Tower USA, "As a result, our customer enjoys high performance and yield, die size reduction and reduced time to market."

About CAC

Comtech AHA Corporation develops and markets superior integrated circuits and intellectual property core technology for communications systems architects worldwide. CAC provides flexible, cost-effective solutions for today's growing bandwidth and reliability challenges. Located in Pullman, Wash., CAC has been setting the standard in Forward Error Correction and Lossless Data Compression technology for more than a decade and offers a variety of standard and custom hardware and IP solutions. For more information, visit www.aha.com. Comtech AHA Corporation is a wholly owned subsidiary of Comtech Telecommunications Corp. (Nasdag:CMTL - News).

About Sycon Design

Sycon Design Inc., a Tower Semiconductor Authorized Design Center, provides proven software technology and optimization services that achieve next-generation performance with today's manufacturing processes to deliver highly optimized complex integrated circuits. Sycon Design serves customers with ultra-high density IC requirements where the need for advanced physical design tools (RTL-GDSII) is high. Sycon Design can maximize performance, optimize power consumption and produce the smallest chip area. Sycon Design is located at 385 Reed Street, Santa Clara, CA 95050. Web site: www.sycon-design.com.

About Tower Semiconductor Ltd.

Tower Semiconductor Ltd. is a pure-play independent wafer foundry established in 1993. The company manufactures integrated circuits with geometries ranging from 1.0 to 0.18 micron; it also provides complementary technical services and design support. In addition to digital CMOS process technology, Tower offers advanced non-volatile memory solutions, mixed-signal and CMOS image-sensor technologies. To provide world-class customer service, the company maintains two manufacturing facilities: Fab 1 has process technologies from 1.0 to 0.35 micron and can produce up to 16,000 150mm wafers per month. Fab 2 features 0.18-micron and below process technologies, including foundry-standard technology. When complete, Fab 2 is expected to offer full production capacity of 33,000 200mm wafers per month. The Tower Web site is located at www.towersemi.com.

Safe Harbor for Tower Semiconductor Ltd.

This press release includes forward-looking statements, which are subject to

risks and uncertainties. Actual results may vary from those projected or implied by such forward-looking statements. Potential risks and uncertainties include, without limitation, risks and uncertainties associated with: (i) our ability to completely satisfy Comtech AHA Corporation's production orders in Fab 2, (ii) the completion of the equipment installation, technology transfer and ramp-up of production in Fab 2, (iii) having sufficient funds to complete the Fab 2 project, (iv) the cyclical nature of the semiconductor industry and the resulting periodic overcapacity, (v) operating our facilities at satisfactory utilization rates, (vi) our ability to capitalize on increases in demand for foundry services, (vii) meeting the conditions to receive Israeli government grants and tax benefits approved for Fab 2 and obtaining the approval of the Israeli Investment Center to extend the five-year investment period under our Fab 2 approved enterprise program and of amendments to our modified business plan, (viii) attracting additional customers, (ix) not receiving orders from our wafer partners and technology providers, (x) failing to maintain and develop our technology processes and services, (xi) competing effectively, (xii) our large amount of debt and our satisfying the covenants set forth in our amended facility agreement, (xiii) achieving acceptable device yields, product performance and delivery times and (xiv) the completion of the documentation for the Siliconix agreement. A more complete discussion of risks and uncertainties that may affect the accuracy of forward-looking statements included in this press release or which may otherwise affect our business is included under the heading "Risk Factors" in our most recent Annual Report on Form 20-F as was filed with the Securities and Exchange Commission and the Israel Securities Authority.

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Exhibit 2

Tower Semiconductor Expedites Production of Mixed-Signal Integrated Circuit for Smart Link

Monday February 23, 7:22 am ET

Record Time for Initial Production from Prototyping

MIGDAL HAEMEK & NETANYA, Israel--(BUSINESS WIRE)--Feb. 23, 2004--Tower Semiconductor (NASDAQ: TSEM; TASE: TSEM) has launched production of a Coder-Decoder (CODEC) integrated circuit (IC) for Smart Link, Ltd., a leading developer and supplier of modem solutions for the communications industry. With an initial production order released already and forecasted orders of few

million dice, this production marks the opportunity for a long term relationship between Tower and Smart Link. Utilizing 0.18-micron, mixed-signal technology in its Fab 2 facility, Tower's prototype process enabled the successful development of Smart Link's SL2800B (Raptor). Tower began producing the SL2800B (Raptor) ICs shortly after prototyping began, utilizing Tower's Shuttle program. Factors essential to the acceleration of production were the simultaneous implementation of the intellectual property (IP) block with the packaging and testing of the first batch of ICs.

Avnet ASIC Israel and Chipidea, participants in Tower's Authorized Design Center program (TADC), helped to achieve first silicon quickly and efficiently. Chipidea provided the mixed signal IP, and Avnet ASIC Israel provided design kits, libraries and other manufacturing tools. Avnet has also integrated the IP and Smart Link logic design and performed Place and Route, Test Vector Generation and Tape Out according to Tower's Design Rules.

"The Smart Link project demonstrates Tower's ability to accelerate the time from project kick-off to production, helping customers achieve exceptional time-to-market," said Danny Hacohen, Tower's vice president of sales for Europe and Asia. "Tower's leadership in mixed-signal execution and close work with its customer and design partners lead to first-time silicon production with maximum efficiency."

"Smart Link benefits greatly from the combined resources of Avnet, ChipIdea and Tower," said Moty Mebel co-founder and CEO of Smart Link "The partnership made the production and verification of our device possible in a quick and highly efficient manner, and we look forward to future projects executed with the same ease and cooperative spirit."

Tower's Authorized Design Center program was launched in September 2003 to help customers accelerate the design-to-silicon process and enhance first-time silicon success. Chipmakers, particularly fabless companies, can augment their own design resources with the specialized design capabilities of Tower-authorized design centers. By working with the design centers, chipmakers can create integrated circuit designs optimized for Tower's manufacturing process technologies. Authorized design centers are capable of designing both complete integrated circuits and embedded IP blocks.

About Tower Semiconductor Ltd.

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About Smart Link Ltd.

Smart Link Ltd. is the third largest worldwide developer and supplier of software-based communications products that provide Internet and Broadband access for PC, Set-Top Boxes and internet appliance OEM markets. Smart Link's technology enables it's customers to replace traditional, hardware-based communications products with high-quality, user-friendly software-based solutions that are smaller and less costly. Products include software and chips that are easily integrated into personal computers (PCs) and information appliances. Our products take advantage of the excess computing power of advanced microprocessors to perform required communications tasks. Smart Link maintains offices in Israel, USA, UK, Taiwan and China. For more information, visit www.smlink.com.

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Exhibit 3

Tower Semiconductor Announces Partial Exercise of Over-Allotment Option

Friday February 20, 11:00 am ET

MIGDAL HAEMEK, Israel--(BUSINESS WIRE)--Feb. 20, 2004--Tower Semiconductor (NASDAQ: TSEM; TASE: TSEM), announced today that the underwriters for Tower's recently completed follow-on public offering have partially exercised their over-allotment option and have acquired an additional 444,500 Tower ordinary shares.

Tower's public offering of 11.0 million ordinary shares closed on January 26, 2004. Net proceeds of the offering, including the partial exercise of the over-allotment option, are approximately \$75.2 million. Following this over-allotment exercise, Tower will have 65,582,383 outstanding shares.

The offering was led by CIBC World Markets, Piper Jaffray and C.E. Unterberg, Towbin.

About Tower Semiconductor Ltd.

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Exhibit 4

Tower Semiconductor Receives Environmental Management Certification

Monday February 9, 7:30 am ET

ISO 14001 endorsement demonstrates commitment to highest standards for customers and environment

MIGDAL HAEMEK, Israel--(BUSINESS WIRE)--Feb. 9, 2004-- In conjunction with its corporate environmental management initiative, Tower Semiconductor Ltd. (NASDAQ: TSEM - News; TASE: TSEM) has received ISO 14001 certification from The Standards Institution of Israel.

A series of international standards on environmental management, ISO 14000 provides a framework for the development of an environmental management system and the supporting audit program. ISO 14001 is the cornerstone standard of the ISO 14000 series. It specifies a framework of control for an environmental management system against which an organization can be certified by a third party.

"Qualifying for ISO 14001 certification represents Tower's involvement and interest in its surrounding community as well as in its customer requirements," said Ziv Hilleli, quality system director at Tower Semiconductor. "As a global citizen, Tower must be aware of all environmental implications, and we must take all necessary measures to eliminate any negative impact. We are fully committed to implementing ISO 14001 principles to achieve continuous improvement in all environmental aspects."

"I am very proud that Tower, the leading semiconductor foundry in Israel, is implementing the ISO 14000 standard," said Ziva Patir, general director of The

Standards Institution of Israel. "This standard is most important for promoting a policy of environmental management. All companies that implement the standard promote environmental quality in their respective activities and in modern society in general. There is no doubt," added Mrs. Patir, "that this standard reflects the close interrelationship between the business community and the quality of life in our modern world."

The ISO 14001 certification applies to all Tower manufacturing facilities, including Fab 1 and the highly advanced Fab 2, where leading-edge semiconductor devices with 0.18-micron and lower geometries are being manufactured. The company's design center in Netanya, Israel received certification, as well.

In other environmental news, Tower Semiconductor was awarded the Sony Green Partner certificate in December 2003. "This is a company-wide effort, and we are all continually working together to meet standard requirements," said Rafi Nave, vice president of customer service at Tower Semiconductor. "Our considerable investment in quality management in general, and in environmental management in particular, contributes to our success and continuous growth. We act responsibly and respectfully in every aspect of our business - towards customers, suppliers and the environment. We are honored to be recognized for our efforts."

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