

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

Schedule 13G
(Rule 13d-102)

Information to be Included in Statements Filed Pursuant to Rules 13d-1(b), (c) and (d) and
Amendments Thereto Filed Pursuant to Rule 13d-2(b)
(Amendment No. 2)*

Tower Semiconductor Ltd.

(Name of Issuer)

Ordinary Shares

(Title of Class of Securities)

M87915100

(CUSIP Number)

December 31, 2009

(Date of Event which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 (the "Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

SCHEDULE 13G

CUSIP NO. M87915100	
1	NAMES OF REPORTING PERSONS Silver Point Capital, L.P.
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)* (a) <input type="radio"/> (b) <input checked="" type="checkbox"/>
3	SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5 SOLE VOTING POWER -0- (See Item 4)
	6 SHARED VOTING POWER -0-
	7 SOLE DISPOSITIVE POWER 6,771,510 (See Item 4)
	8 SHARED DISPOSITIVE POWER -0-
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 6,771,510 (See Item 4)
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="radio"/>
11	PERCENT OF CLASS REPRESENTED IN ROW (9) 3.4%¹
12	TYPE OF REPORTING PERSON* IA, PN

**SEE INTRUCTIONS BEFORE FILLING OUT.

¹ The percentages used herein and in the rest of this Schedule 13G are calculated based upon 198,961,286 ordinary shares outstanding based upon information provided by the issuer and includes 6,771,510 ordinary shares that may be acquired through exercise of warrants to purchase the issuer's ordinary shares.

SCHEDULE 13G

CUSIP NO. M87915100					
1	NAMES OF REPORTING PERSONS Edward A. Mulé				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)* <table border="0" style="width: 100%;"> <tr> <td style="width: 80%;"></td> <td style="text-align: right;">(a) <input type="radio"/></td> </tr> <tr> <td></td> <td style="text-align: right;">(b) <input checked="" type="checkbox"/></td> </tr> </table>		(a) <input type="radio"/>		(b) <input checked="" type="checkbox"/>
	(a) <input type="radio"/>				
	(b) <input checked="" type="checkbox"/>				
3	SEC USE ONLY				
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States				
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5 SOLE VOTING POWER -0-				
	6 SHARED VOTING POWER -0- (See Item 4)				
	7 SOLE DISPOSITIVE POWER -0-				
	8 SHARED DISPOSITIVE POWER 6,771,510 (See Item 4)				
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 6,771,510 (See Item 4)				
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <table border="0" style="width: 100%;"> <tr> <td style="width: 80%;"></td> <td style="text-align: right;">o</td> </tr> </table>		o		
	o				
11	PERCENT OF CLASS REPRESENTED IN ROW (9) 3.4%				
12	TYPE OF REPORTING PERSON* IN				

**SEE INTRUCTIONS BEFORE FILLING OUT.

SCHEDULE 13G

CUSIP NO. M87915100	
1	NAMES OF REPORTING PERSONS Robert J. O'Shea
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)* (a) <input type="radio"/> (b) <input checked="" type="checkbox"/>
3	SEC USE ONLY
4	CITIZENSHIP OR PLACE OF ORGANIZATION United States
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5 SOLE VOTING POWER -0-
	6 SHARED VOTING POWER -0- (See Item 4)
	7 SOLE DISPOSITIVE POWER -0-
	8 SHARED DISPOSITIVE POWER 6,771,510 (See Item 4)
9	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 6,771,510 (See Item 4)
10	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES* <input type="radio"/>
11	PERCENT OF CLASS REPRESENTED IN ROW (9) 3.4%
12	TYPE OF REPORTING PERSON* IN

**SEE INTRUCTIONS BEFORE FILLING OUT.

Item 1(a) Name of Issuer:

The name of the issuer is Tower Semiconductor Ltd. (the "Company").

Item 1(b) Address of Issuer's Principal Executive Offices:

The Company's principal executive office is located at Ramat Gavriel Industrial Park, P.O. Box 619, Migdal Haemek, Israel 23105.

Item 2(a) Name of Person Filing:

This Schedule 13G is being jointly filed by Silver Point Capital, L.P., a Delaware limited partnership, Mr. Edward A. Mulé and Mr. Robert J. O'Shea with respect to the ownership of the ordinary shares by Silver Point Capital Fund, L.P. (the "Fund") and Silver Point Capital Offshore Fund, Ltd. (the "Offshore Fund").²

The Reporting Persons have entered into a Joint Filing Agreement, dated February 16, 2010, a copy of which is filed with this Schedule 13G as Exhibit A, pursuant to which the Reporting Persons have agreed to file this statement jointly in accordance with the provisions of Rule 13d-1(k)(1) under the Act.

Item 2(b) Address of Principal Business Office or, if none, Residence:

The address of the principal business office of each of the Reporting Persons is Two Greenwich Plaza, Greenwich, CT 06830.

Item 2(c) Citizenship:

Silver Point Capital, L.P. is organized as a limited partnership under the laws of the State of Delaware. Both Mr. Mulé and Mr. O'Shea are U.S. citizens.

Item 2(d) Title of Class of Securities:

Ordinary Shares, NIS 1.00 par value per share.

Item 2(e) CUSIP No.:

M87915100

Item 3 If this statement is filed pursuant to Rules 13d-1(b), or 13d-2(b), check whether the person filing is a:

Not Applicable.

² Silver Point Capital, L.P. is the investment manager of the Fund and the Offshore Fund and by virtue of such status may be deemed to be the beneficial owner of the ordinary shares held by the Fund and the Offshore Fund. Silver Point Capital Management, LLC ("Management") is the general partner of Silver Point Capital, L.P. and as a result may be deemed to be the beneficial owner of the ordinary shares held by the Fund and the Offshore Fund. Each of Mr. Edward A. Mulé and Mr. Robert J. O'Shea is a member of Management and has voting and investment power with respect to the ordinary shares held by the Fund and the Offshore Fund and may be deemed to be a beneficial owner of the ordinary shares held by the Fund and the Offshore Fund.

Item 4 **Ownership:**A. Silver Point Capital, L.P.

- (a) Amount beneficially owned: 6,771,510³
- (b) Percent of class: 3.4%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: -0-
 - (iii) Sole power to dispose or direct the disposition: 6,771,510
 - (iv) Shared power to dispose or direct the disposition: -0-

B. Edward A. Mulé

- (a) Amount beneficially owned: 6,771,510
- (b) Percent of class: 3.4%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: -0-
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 6,771,510

C. Robert J. O'Shea

- (a) Amount beneficially owned: 6,771,510
- (b) Percent of class: 3.4%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: : -0-
 - (ii) Shared power to vote or direct the vote: -0-
 - (iii) Sole power to dispose or direct the disposition: -0-
 - (iv) Shared power to dispose or direct the disposition: 6,771,510

³ The number of ordinary shares reported as beneficially owned in this Schedule 13G consists of 6,771,510 ordinary shares that may be acquired by the Fund and the Offshore Fund through exercise of warrants to purchase the issuer's ordinary shares.

Item 5 **Ownership of Five Percent or Less of a Class:**

If this statement is being filed to report the fact that as of the date hereof each of the Reporting Persons has ceased to be the beneficial owner of more than five percent of the class of securities, check the following x.

Item 6 **Ownership of More Than Five Percent on Behalf of Another Person:**

See response to Item 4.

Item 7 **Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person:**

Not applicable.

Item 8 **Identification and Classification of Members of the Group:**

Not applicable.

Item 9 **Notice of Dissolution of Group:**

Not applicable.

Item 10 **Certification:**

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 16, 2010

Silver Point Capital, L.P.

By: /s/ Frederick H. Fogel

Name: Frederick H. Fogel

Its: Authorized Signatory

Exhibit A

AGREEMENT REGARDING THE JOINT FILING OF SCHEDULE 13G

The undersigned hereby agree as follows:

(i) Each of them is individually eligible to use the Schedule 13G to which this Exhibit is attached, and such Schedule 13G is filed on behalf of each of them; and

(ii) Each of them is responsible for the timely filing of such Schedule 13G and any amendments thereto, and for the completeness and accuracy of the information concerning such person contained therein; but none of them is responsible for the completeness or accuracy of the information concerning the other persons making the filing, unless such person knows or has reason to believe that such information is inaccurate.

Date: February 16, 2010

Silver Point Capital, L.P.

By: /s/ Frederick H. Fogel

Name: Frederick H. Fogel

Its: Authorized Signatory

/s/ Edward A. Mulé

Edward A. Mulé, individually

/s/ Robert J. O'Shea

Robert J. O'Shea, individually