

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

FORM S-1/A
(Amendment No. 4)

REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

WAFERGEN BIO-SYSTEMS, INC.
(Exact name of registrant as specified in its charter)

Nevada
(State or other jurisdiction of
incorporation or organization)

3826
(Primary Standard Industrial
Classification Code Number)

90-0416683
(I.R.S. Employer
Identification Number)

**7400 Paseo Padre Parkway
Fremont, CA 94555
(510) 651-4450**
(Address, including zip code, and telephone number, including
area code, of registrant's principal executive offices)

**Mona Chadha, Office of the President
7400 Paseo Padre Parkway
Fremont, CA 94555
(510) 651-4450**
(Name, address, including zip code, and telephone number, including
area code, of agent for service)

With Copies to:

**John W. Campbell III, Esq.
John M. Rafferty, Esq.
Morrison & Foerster LLP
425 Market Street
San Francisco, California 94105
(415) 268-7000**

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box. ☒

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Securities Exchange Act of 1934. (Check one):

- Large accelerated filer ☐
- Accelerated filer ☐
- Non-accelerated filer ☐ (Do not check if a smaller reporting company)
- Smaller reporting company ☒

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Explanatory Note

This Amendment is being filed solely for the purpose of correcting the signature page in Part II of the Registration Statement. Accordingly, the Prospectus is unchanged and is being omitted from this filing.

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

Set forth below is an estimate (except for registration fees, which are actual) of the approximate amount of the fees and expenses payable by us in connection with the issuance and distribution of the shares of common stock.

| EXPENSE | AMOUNT |
|---------------------------------|-------------------|
| Registration Fees | \$ 7,696 |
| Legal Fees | 90,000 |
| Accounting Fees | 50,000 |
| Miscellaneous Fees and Expenses | 6,000 |
| Total | <u>\$ 153,696</u> |

Item 14. Indemnification of Directors and Officers.

Nevada Revised Statutes ("NRS") Sections 78.7502 and 78.751 provide us with the power to indemnify any of our directors, officers, employees and agents. The person entitled to indemnification must have conducted himself in good faith, and must reasonably believe that his conduct was in, or not opposed to, our best interests. In a criminal action, the director, officer, employee or agent must not have had reasonable cause to believe that his conduct was unlawful.

Under NRS Section 78.751, advances for expenses may be made by agreement if the director or officer affirms in writing that he has met the standards for indemnification and will personally repay the expenses if it is determined that such officer or director did not meet those standards.

Our bylaws include an indemnification provision under which we have the power to indemnify, to the extent permitted under Nevada law, our current and former directors and officers, or any person who serves or served at our request for our benefit as a director or officer of another corporation or our representative in a partnership, joint venture, trust or other enterprise, against all expenses, liability and loss reasonably incurred by reason of being or having been a director, officer or representative of ours or any of our subsidiaries. We may make advances for expenses upon receipt of an undertaking by or on behalf of the director or officer to repay the amount if it is ultimately determined by a court of competent jurisdiction that he/she is not entitled to be indemnified by us. If Section 2115 of the CGCL is applicable to us, the laws of California also will govern.

Our articles of incorporation provide a limitation of liability such that no director or officer shall be personally liable to us or any of our stockholders for damages for breach of fiduciary duty as a director or officer, involving any act or omission of any such director or officer, provided there was no intentional misconduct, fraud or a knowing violation of the law, or payment of dividends in violation of NRS Section 78.300.

We have entered into separate indemnification agreements with our directors and officers which would require us, among other things, to indemnify them against certain liabilities which may arise by reason of their status or service as directors or officers to the fullest extent permitted by law. At present, there is no pending litigation or proceeding involving any of our directors or officers of regarding which indemnification is sought, nor are we aware of any threatened litigation that may result in claims for indemnification. We also maintain insurance policies that indemnify our directors and officers against various liabilities, including liabilities arising under the Securities Act, that might be incurred by any director or officer in his or her capacity as such.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of ours under Nevada law or otherwise, we have been advised the opinion of the Securities and

Exchange Commission is that such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event a claim for indemnification against such liabilities (other than payment by us for expenses incurred or paid by a director, officer or controlling person of ours in successful defense of any action, suit, or proceeding) is asserted by a director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction, the question of whether such indemnification by it is against public policy in the Securities Act and will be governed by the final adjudication of such issue.

Item 15. Recent Sales of Unregistered Securities.

Malaysian Financings

On July 18, 2008, our Malaysian subsidiary, WaferGen Biosystems (M) Sdn. Bhd. (“WGBM”), received \$1.0 million in exchange for the issuance of Series A Redeemable Convertible Preference Shares (“Series A RCPS”) in a private placement to Malaysian Technology Development Corporation Sdn. Bhd. (“MTDC”), a venture capital and development firm in Malaysia. WGBM sold 444,444 Series A RCPS in the private placement at the U.S. dollar equivalent of \$2.25 per share. WGBM received an additional \$1.0 million in exchange for an additional 444,444 Series A RCPS at the U.S. dollar equivalent of \$2.25 per share (the “Subsequent Closing”) on November 27, 2008.

On April 3, 2009, WaferGen Bio-systems, Inc. (“WBSI”) and WGBM entered into a subscription agreement with two investors pursuant to which WGBM agreed to sell 666,666 shares of Series B Redeemable Convertible Preference Shares (“Series B RCPS”) to these investors in a private placement at a price of US\$2.25 per share. On July 1, 2009, WBSI and WGBM entered into a subscription agreement with another investor pursuant to which WGBM agreed to sell 188,057 shares of Series B RCPS to another investor under substantially the same terms. The aggregate purchase price for the Series B RCPS is US\$1.9 million, all of which was received between June 8, 2009 and May 13, 2010.

Both the Series A RCPS and the Series B RCPS (the “RCPS”) have a liquidation preference over WGBM’s ordinary shares in an amount equal to the purchase price of the RCPS, plus any accrued but unpaid dividends. WGBM is not obligated to declare or pay dividends on the RCPS. Holders of the RCPS generally will not have voting rights, except as required under Malaysian law. WGBM will be required to obtain the consent of the holders of at least a majority of the outstanding RCPS prior to taking certain actions. Each RCPS will be convertible into ordinary shares of WGBM at the option of the holder at any time based on the applicable conversion rate at such time.

The holders of the RCPS have the right, at any time after December 31, 2011, to cause WGBM to redeem the RCPS at a price equal to the purchase price of the RCPS, plus a redemption premium of 20% per annum, from funds legally available for distribution. The holders of the RCPS also will have certain put rights with respect to their shares as follows: (1) the holders will have the right to cause WBSI to exchange their RCPS for common stock of WBSI at an effective exchange rate of US\$2.25 per share of WBSI common stock, provided that if during the 10-day trading period immediately prior to the holder’s conversion notice the average closing price of WBSI’s common stock is less than US\$2.647, then the holder’s Series B (but not Series A) RCPS shall convert at an exchange rate equal to 85% of such 10-day average closing price; (2) the holders will have the right to cause WBSI to purchase all of the RCPS at a price of US\$2.25 per share, plus interest at a rate of 6% (for Series A RCPS) or 8% (for Series B RCPS) per annum with yearly rests, if (x) there is a breach of the subscription agreement by WBSI or WGBM or (y) during the year 2011, the price of WBSI’s stock is below US\$2.25 or the holder is unable to exercise its put as described in clause (1) above as a result of any breach or default of the subscription agreement by WBSI.

On March 10, 2011, WGBM received \$5,000,000, less issuance costs totaling \$6,272, in exchange for the issuance of 3,233,734 Series C Convertible Preference Shares (“CPS”) to MTDC, in a private placement at the U.S. dollar equivalent of \$1.5462 per share, representing the first subscription under a Share Subscription Agreement dated December 14, 2010, (“SSA”) to sell 3,233,734 Series C CPS at an initial closing and, should MTDC so elect within 36 months of the initial closing, to sell 1,077,911 shares of Series C CPS at a subsequent closing at the U.S. dollar equivalent of US\$2.3193 per share. Each Series C CPS will convert into one share of WBSI’s common stock on the anniversary of each closing, or at any earlier date MTDC’s option. MTDC may also elect to convert their Series C CPS into ordinary shares of our subsidiary, WGBM, at any time, at a conversion rate of one ordinary share per 100 CPS.

The proceeds from the private placements have been or will be used to support the high-volume manufacturing of our SmartChip System.

June 2009 Private Placement

In June 2009, we sold, in a private placement, 3,305,000 units consisting of an aggregate of 3,305,000 shares of its common stock and five-year warrants to purchase an aggregate of up to 991,500 shares of its common stock with an exercise price of \$2.00 per share. In August 2009, we sold, in the same private placement, a further 1,704,000 units consisting of an aggregate of 1,704,000 shares its common stock and five-year warrants to purchase an aggregate of up to 511,200 shares of its common stock with an exercise price of \$2.00 per share. Under certain circumstances, the warrants are exercisable using cashless exercise. The purchase price for the units was \$1.25 per unit, or \$6,261,250 in the aggregate.

The purchasers included Alnoor Shivji (our Chairman and, at the time of the purchase, also our President and Chief Executive Officer), Robert Coradini (now a member of our board of directors (but not at the time of the purchase)), Dr. Robert Hariri (a member of our board of directors), and certain other investors that participated in our previous private placements. Messrs. Shivji and Coradini and Dr. Hariri purchased 800,000, 100,000 and 100,000 units, respectively, for an aggregate purchase price of \$1,000,000, \$125,000 and \$125,000, respectively. Messrs. Shivji and Coradini and Dr. Hariri each participated in the private placement on substantially the same terms as the other purchasers.

Net proceeds received from the June 2009 Private Placement were used for research and development, sales and marketing, an investor relations program and repayment of debt and for working capital and other general corporate purposes.

December 2009 Private Placement

On December 23, 2009, December 30, 2009 and January 6, 2010, we sold, in a private placement, 3,390,335 units consisting of an aggregate of 3,390,335 shares its common stock and five-year warrants to purchase an aggregate of up to 847,585 shares of its common stock with an exercise price of \$2.50 per share. Under certain circumstances, the warrants will be exercisable using cashless exercise. The purchase price for the units was \$1.50 per unit, or \$5,085,500 in the aggregate.

The purchasers included the Jameel Shivji Irrevocable Trust, the Shivji Children's Trust fbo Zahra Shivji and the Shivji Children's Trust fbo Suraya Shivji (each, a "Shivji Children's Trust") and The Shivji Family Trust (together with the Shivji Children's Trusts, the "Shivji Trusts") (all of which are affiliates of Alnoor Shivji, our Chairman and, at the time of the purchase, also our President and Chief Executive Officer), Cojack Investment Opportunities, LLC ("Cojack") (which is an affiliate of Dr. Raymond Dean Hautamaki, a member of our board of directors), and certain other investors that participated in our previous private placements. The Shivji Trusts and Cojack purchased 116,666, and 20,000 units, respectively, for an aggregate purchase price of \$175,000, and \$30,000, respectively. The Shivji Trusts and Cojack each participated in the December 2009 Private Placement on substantially the same terms as the other purchasers.

Net proceeds received from the December 2009 Private Placement were used for research and development, sales and marketing, an investor relations program and repayment of debt and for working capital and other general corporate purposes.

May 2011 Private Placement

On May 27, 2011, we sold 2,937,499.97 shares of Series A-1 Convertible Preferred Stock, Convertible Promissory Notes in the principal amount of \$15,275,000 convertible at \$0.57 per share and warrants to purchase an aggregate of up to 56,173,248 shares of common stock in a private placement for an aggregate purchase price of \$30,550,000. Subject to certain ownership limitations, the warrants were exercisable immediately at an exercise price of \$0.62 per share. The warrants expire on May 27, 2016, five years after the issuance date, and under certain circumstances are exercisable using cashless exercise. Under registration rights agreements entered in connection with the sale of the units, the purchasers are entitled "piggyback" registration rights.

The purchasers included The Shivji Family Trust (an affiliate of Alnoor Shivji, our Chairman and, at the time of the purchase, also our President and Chief Executive Officer), Joel Kanter, a member of our board of directors, The Kanter Family Foundation (“The Kanter Foundation”, which is an affiliate of Joel Kanter) and Robert Coradini, a member of our board of directors. The Shivji Family Trust purchased 38,461.54 shares of Series A-1 Convertible Preferred Stock, a Convertible Promissory Note in the principal amount of \$200,000 and warrants to purchase an aggregate of up to 735,493 shares of common stock for an aggregate purchase price of \$400,000. Joel Kanter purchased 9,615.38 shares of Series A-1 Convertible Preferred Stock, a Convertible Promissory Note in the principal amount of \$50,000 and warrants to purchase an aggregate of up to 183,873 shares of common stock for an aggregate purchase price of \$100,000. The Kanter Foundation purchased 4,807.69 shares of Series A-1 Convertible Preferred Stock, a Convertible Promissory Note in the principal amount of \$25,000 and warrants to purchase an aggregate of up to 91,937 shares of common stock for an aggregate purchase price of \$50,000. Robert Coradini purchased 24,037.46 shares of Series A-1 Convertible Preferred Stock, a Convertible Promissory Note in the principal amount of \$125,000 and warrants to purchase an aggregate of up to 459,683 shares of common stock for an aggregate purchase price of \$250,000. The Shivji Family Trust, Joel Kanter, The Kanter Foundation and Robert Coradini each participated in the May 2011 Private Placement on substantially the same terms as the other purchasers.

Net proceeds received from the May 2011 Private Placement will be used for expanding the commercialization capabilities of the company to market the SmartChip Real-Time PCR system and related products, and for working capital and general corporate purposes.

The Malaysian Financings made solely in “offshore transactions,” as defined in Regulation S under the Securities Act. The June 2009 Private Placement, the December 2009 Private Placement and the May 2011 Private Placement were made solely to “accredited investors,” as defined in Regulation D under the Securities Act, or “qualified institutional buyers” as defined in Rule 144A(a) under the Securities Act. The securities sold in the Malaysian Financings, the June 2009 Private Placement, the December 2009 Private Placement and the May 2011 Private Placement were not, prior to their issuance, registered under the Securities Act, or the securities laws of any state, and were offered and sold in reliance on the exemption from registration afforded by Section 4(2) and Regulation D (Rule 506) or Regulation S under the Securities Act and corresponding provisions of state securities laws, which exempt transactions by an issuer not involving any public offering.

Item 16. Exhibits and Financial Statement Schedules

Financial Statement Schedules

All financial statement schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

Exhibits

The following Exhibits are being filed with this registration statement on Form S-1/A.

| Exhibit Number | Exhibit Description | Filed Herewith | Incorporated by Reference | | | |
|----------------|---|----------------|---------------------------|---------------|---------|-------------|
| | | | Form | Period Ending | Exhibit | Filing Date |
| 2.1 | Agreement and Plan of Merger and Reorganization, dated as of May 31, 2007, by and among WBSI, WaferGen Acquisition Corp., and WaferGen, Inc. | | 8-K | | 2.1 | 6/5/2007 |
| 2.2 | Certificate of Merger of WaferGen Acquisition Corp. with and into WaferGen, Inc., dated May 31, 2007 | | 8-K | | 2.2 | 1/16/2008 |
| 3.1 | Articles of Incorporation of WaferGen Bio-systems, Inc. | | SB-2 | | 3.1 | 8/9/2006 |
| 3.2 | Amended and Restated Articles of Incorporation of WaferGen Bio-systems, Inc., dated January 31, 2007 | | 8-K | | 3.1 | 2/1/2007 |
| 3.3 | Certificate of Designation of Rights, Preferences and Limitations of Series A-1 and Series A-2 Convertible Preferred Stock | | 8-K | | 3.1 | 6/1/2011 |
| 3.4 | Bylaws of WaferGen Bio-systems, Inc. | | SB-2 | | 3.2 | 8/9/2006 |
| 3.5 | First Amendment to Bylaws of WaferGen Bio-systems, Inc. | | 8-K | | 3.2 | 6/1/2011 |
| 5.1 | Opinion of McDonald Carano Wilson LLP | | S-1 | | 5.1 | 10/27/11 |
| 10.1 † | Form of Warrants, made as of May 5, 2007, to purchase up to an aggregate of 115,424 shares of WaferGen Bio-systems, Inc.'s Common Stock | | 10-K | 12/31/09 | 10.1 | 3/22/10 |
| 10.2 | Form of Common Stock Purchase Warrant issued to investors in a private placement, the initial closing of which was held on May 31, 2007 | | 8-K | | 10.21 | 6/5/2007 |
| 10.3 | Form of Warrant issued to Placement Agent in connection with a private placement, the initial closing of which was held on May 31, 2007 | | 8-K | | 10.22 | 6/5/2007 |
| 10.4 † | Employment Agreement dated May 31, 2007, between WaferGen Bio-systems, Inc. and Alnoor Shivji | | 8-K | | 10.26 | 6/5/2007 |
| 10.5 | Securities Purchase Agreement, dated May 19, 2008, by and among WaferGen Bio-systems, Inc. and the purchasers identified on the signature pages thereto | | 8-K | | 10.1 | 5/21/2008 |
| 10.6 | Form of Common Stock Purchase Warrant issued to investors identified in the Securities Purchase Agreement dated May 19, 2008 | | 8-K | | 10.2 | 5/21/2008 |
| 10.7 † | WaferGen Bio-systems, Inc. 2008 Stock Incentive Plan | | 8-K | | 10.1 | 7/3/2008 |
| 10.8 † | Form of Non-Qualified Stock Option award under 2008 Stock Incentive Plan | | 10-K | 12/31/2008 | 10.35 | 3/27/2009 |

| Exhibit Number | Exhibit Description | Filed Herewith | Incorporated by Reference | | | |
|----------------|--|----------------|---------------------------|---------------|---------|-------------|
| | | | Form | Period Ending | Exhibit | Filing Date |
| 10.9 | Share Subscription Agreement and Shareholders' Agreement dated May 8, 2008, by and among WaferGen Bio-systems, Inc., Malaysian Technology Development Corporation Sdn. Bhd. and WaferGen Biosystems (M) Sdn. Bhd. | | 10-Q | 9/30/2008 | 10.1 | 11/14/2008 |
| 10.10 | Put Agreement dated May 28, 2008, by and among WaferGen Bio-systems, Inc. and Holders of the Series A Redeemable Convertible Preference Shares in WaferGen Biosystems (M) Sdn. Bhd. | | 10-Q | 9/30/2008 | 10.2 | 11/14/2008 |
| 10.11 † | Letter Agreement dated January 16, 2009, by and between WaferGen Bio-systems, Inc. and Alnoor Shivji | | 10-K | 12/31/2008 | 10.39 | 3/27/2009 |
| 10.12 | Form of WaferGen Bio-systems, Inc. Distribution Agreement | | 10-K | 12/31/2008 | 10.42 | 3/27/2009 |
| 10.13 | Share Subscription Agreement dated April 3, 2009, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd., Primar Mahawangsa Sdn. Bhd. and Expedient Equity Ventures Sdn. Bhd. | | 8-K | | 10.1 | 4/14/2009 |
| 10.14 | Put Agreement dated April 3, 2009, by and among WaferGen Bio-systems, Inc. and Holders of Series B Redeemable Convertible Preference Shares in WaferGen Biosystems (M) Sdn. Bhd. | | 8-K | | 10.2 | 4/14/2009 |
| 10.15 | Deed of Adherence to the Share Subscription and Shareholders' Agreement dated May 8, 2008, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd., Primar Mahawangsa Sdn. Bhd., Expedient Equity Ventures Sdn. Bhd. and Malaysian Technology Development Corporation Sdn. Bhd. | | 10-Q | 3/31/2009 | 10.4 | 5/12/2009 |
| 10.16 | Form of Subscription Agreement between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the June and August 2009 private placement offering of units of securities | | 10-Q | 6/30/2009 | 10.5 | 8/10/2009 |
| 10.17 | Form of Warrants to purchase shares of Common Stock, issued June 16, 2009, to investors in the June and August 2009 private placement offering of units of securities | | 10-Q | 6/30/2009 | 10.6 | 8/10/2009 |
| 10.18 | Registration Rights Agreement between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the June and August 2009 private placement offering of units of securities | | 10-Q | 6/30/2009 | 10.7 | 8/10/2009 |
| 10.19 | Form of Warrant to purchase shares of Common Stock, issued to Spencer Trask Ventures, Inc. and certain related parties in connection with the June and August 2009 private placement offering of units of securities | | 10-Q | 6/30/2009 | 10.8 | 8/10/2009 |
| 10.20 | Share Subscription Agreement dated July 1, 2009, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd. and Kumpulan Modal Perdana Sdn. Bhd. | | 10-Q | 9/30/2009 | 10.1 | 11/13/2009 |
| 10.21 | Put Agreement dated July 1, 2009, by and among WaferGen Bio-systems, Inc. and Holders of Series B Redeemable Convertible Preference Shares in WaferGen Biosystems (M) Sdn. Bhd. | | 10-Q | 9/30/2009 | 10.2 | 11/13/2009 |
| 10.22 | Deed of Adherence dated July 1, 2009, to the Share Subscription and Shareholders' Agreement dated May 8, 2008, and the Share Subscription Agreement dated April 3, 2009, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd., Primar Mahawangsa Sdn. Bhd., Expedient Equity Ventures Sdn. Bhd., Malaysian Technology Development Corporation Sdn. Bhd. and Kumpulan Modal Perdana Sdn. Bhd. | | 10-Q | 9/30/2009 | 10.4 | 11/13/2009 |
| 10.23 † | Employment Agreement, effective October 29, 2009, by and between WaferGen Bio-systems, Inc. and Mona Chadha | | 10-Q | 9/30/2009 | 10.5 | 11/13/2009 |
| 10.24 | Lease Agreement by and between WaferGen, Inc. and LBA Realty Fund III-Company VII, LLC dated October 22, 2009 | | 10-Q | 9/30/2009 | 10.6 | 11/13/2009 |

| Exhibit Number | Exhibit Description | Filed Herewith | Incorporated by Reference | | | |
|----------------|---|----------------|---------------------------|---------------|---------|-------------|
| | | | Form | Period Ending | Exhibit | Filing Date |
| 10.25 | Form of Subscription Agreement between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the December 2009 and January 2010 private placement offering of units of securities | | S-1 | | 10.58 | 3/2/2010 |
| 10.26 | Form of Warrants to purchase shares of Common Stock, issued December 23, 2009, to investors in the December 2009 and January 2010 private placement offering of units of securities | | S-1 | | 10.59 | 3/2/2010 |
| 10.27 | Registration Rights Agreement, dated December 23, 2009, between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the December 2009 and January 2010 private placement offering of units of securities | | S-1 | | 10.60 | 3/2/2010 |
| 10.28 | Securities Purchase Agreement, dated July 1, 2010, between WaferGen Bio-systems, Inc. and each investor party thereto in connection with the July 2010 offering of units of securities | | 8-K | | 10.1 | 7/8/2010 |
| 10.29 | Form of Warrants to purchase shares of Common Stock, issued July 7, 2010, to investors in the July 2010 offering of units of securities | | 8-K | | 4.1 | 7/8/2010 |
| 10.30 | Form of Warrant to purchase shares of Common Stock, issued July 7, 2010, to placement agents and certain related parties in connection with the July 2010 offering of units of securities | | 10-Q | 6/30/2010 | 10.3 | 8/16/2010 |
| 10.31 † | WaferGen Bio-systems, Inc. 2008 Stock Incentive Plan, as amended | | 8-K | | 10.1 | 9/22/2010 |
| 10.32 † | Employment Agreement, effective September 3, 2010, by and between WaferGen Bio-systems, Inc. and Donald Huffman | | 10-Q | 9/30/2010 | 10.2 | 11/15/2010 |
| 10.33 | Loan and Security Agreement, dated December 7, 2010, between Oxford Finance Corporation, Wafergen Inc. and WaferGen Bio-systems, Inc. | | 8-K | | 10.1 | 12/13/2010 |
| 10.34 | Warrant to purchase shares of Common Stock, issued December 7, 2010, to Oxford Finance Corporation | | 8-K | | 10.2 | 12/13/2010 |
| 10.35 | Share Subscription Agreement dated December 14, 2010, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd. and Malaysian Technology Development Corporation Sdn. Bhd. | | 8-K | | 10.1 | 12/15/2010 |
| 10.36 | Put Agreement dated December 14, 2010, by and among WaferGen Bio-systems, Inc. and Malaysian Technology Development Corporation Sdn. Bhd. | | 8-K | | 10.2 | 12/15/2010 |
| 10.37 | Amended and Restated Shareholders' Agreement dated December 14, 2010, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd., Malaysian Technology Development Corporation Sdn. Bhd. and Prima Mahawangsa Sdn. Bhd. | | 8-K | | 10.3 | 12/15/2010 |
| 10.38 | Purchase Agreement, dated May 25, 2011, between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the May 2011 private placement offering of units of securities | | 8-K | | 10.1 | 6/1/2011 |
| 10.39 | Registration Rights Agreement, dated May 27, 2011, between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the May 2011 private placement offering of units of securities | | 8-K | | 10.2 | 6/1/2011 |
| 10.40 | Form of Convertible Promissory Note, dated May 27, 2011, to investors in the May 2011 private placement offering of units of securities | | 8-K | | 10.3 | 6/1/2011 |
| 10.41 | Form of Warrants to purchase shares of Common Stock, issued May 27, 2011, to investors in the May 2011 private placement offering of units of securities | | 8-K | | 10.4 | 6/1/2011 |
| 10.42 | Letter Agreement, dated as of May 27, 2011, by and among WaferGen Bio-systems, Inc. and the investors signatory thereto | | 10-Q | 6/30/2011 | 10.1 | 9/12/2011 |

| Exhibit Number | Exhibit Description | Filed Herewith | Incorporated by Reference | | | |
|-------------------|--|-------------------|---------------------------|------------------|---------|-------------|
| | | | Form | Period Ending | Exhibit | Filing Date |
| 10.43 | Omnibus Amendment No. 1 to Convertible Promissory Notes, dated as of September 30, 2011 by and among WaferGen Bio-systems, Inc. and the holder signatories thereto | | 8-K | | 10.1 | 10/8/2011 |
| 10.44 | Letter Agreement, dated as of September 30, 2011 by and among WaferGen Bio-systems, Inc. and the investors signatory thereto | | 8-K | | 10.3 | 10/8/2011 |
| 21.1 | Subsidiaries of the Registrant | | S-1 | | 21.1 | 10/27/11 |
| 23.1 | Letter of Consent from Independent Registered Public Accounting Firm, Rowbotham & Company LLP | | S-1 | | 23.1 | 10/27/11 |
| 23.2 | Letter of Consent from McDonald Carano Wilson LLP (included in Exhibit 5.1) | | S-1 | | 23.2 | 10/27/11 |

† Indicates a management contract or compensatory plan or arrangement.

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of the securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered that remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability of the undersigned registrant under the Securities Act to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424 (§ 230.424 of this chapter);

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable.

In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the

registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

For the purpose of determining liability under the Securities Act to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A (§ 230.430A of this chapter), shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Fremont, State of California, on November 2, 2011.

WAFERGEN BIO-SYSTEMS, INC.

By: /s/ Mona Chadha

Mona Chadha

Office of the President and Chief Operating Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

| SIGNATURE | TITLE | DATE |
|------------------------------|---|------------------|
| <u>/s/ Mona Chadha</u> | Office of the President and Chief Operating Officer | |
| <u>Mona Chadha</u> | (Principal Executive Officer) | November 2, 2011 |
| <u>/s/ Donald Huffman</u> | Office of the President and Chief Financial Officer | |
| <u>Donald Huffman</u> | (Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer) | November 2, 2011 |
| <u>/s/ Alnoor Shivji</u> | Chairman of the Board | November 2, 2011 |
| <u>Alnoor Shivji</u> | | |
| <u>*</u> | Director | November 2, 2011 |
| <u>Robert Coradini</u> | | |
| <u>*</u> | Director | November 2, 2011 |
| <u>Dr. Robert Hariri</u> | | |
| <u>*</u> | Director | November 2, 2011 |
| <u>Dr. R. Dean Hautamaki</u> | | |
| <u>*</u> | Director | November 2, 2011 |
| <u>Joel Kanter</u> | | |
| <u>*</u> | Director | November 2, 2011 |
| <u>Makoto Kaneshiro</u> | | |
| <u>*</u> | Director | November 2, 2011 |
| <u>Dr. Timothy Triche</u> | | |

By: /s/ ALNOOR SHIVJI

Alnoor Shivji

Attorney-in-fact

EXHIBIT INDEX

| Exhibit Number | Exhibit Description | Filed Herewith | Incorporated by Reference | | | |
|----------------|---|----------------|---------------------------|---------------|---------|-------------|
| | | | Form | Period Ending | Exhibit | Filing Date |
| 2.1 | Agreement and Plan of Merger and Reorganization, dated as of May 31, 2007, by and among WBSI, WaferGen Acquisition Corp., and WaferGen, Inc. | | 8-K | | 2.1 | 6/5/2007 |
| 2.2 | Certificate of Merger of WaferGen Acquisition Corp. with and into WaferGen, Inc., dated May 31, 2007 | | 8-K | | 2.2 | 1/16/2008 |
| 3.1 | Articles of Incorporation of WaferGen Bio-systems, Inc. | | SB-2 | | 3.1 | 8/9/2006 |
| 3.2 | Amended and Restated Articles of Incorporation of WaferGen Bio-systems, Inc., dated January 31, 2007 | | 8-K | | 3.1 | 2/1/2007 |
| 3.3 | Certificate of Designation of Rights, Preferences and Limitations of Series A-1 and Series A-2 Convertible Preferred Stock | | 8-K | | 3.1 | 6/1/2011 |
| 3.4 | Bylaws of WaferGen Bio-systems, Inc. | | SB-2 | | 3.2 | 8/9/2006 |
| 3.5 | First Amendment to Bylaws of WaferGen Bio-systems, Inc. | | 8-K | | 3.2 | 6/1/2011 |
| 5.1 | Opinion of McDonald Carano Wilson LLP | | S-1 | | 5.1 | 10/27/11 |
| 10.1 † | Form of Warrants, made as of May 5, 2007, to purchase up to an aggregate of 115,424 shares of WaferGen Bio-systems, Inc.'s Common Stock | | 10-K | 12/31/09 | 10.1 | 3/22/10 |
| 10.2 | Form of Common Stock Purchase Warrant issued to investors in a private placement, the initial closing of which was held on May 31, 2007 | | 8-K | | 10.21 | 6/5/2007 |
| 10.3 | Form of Warrant issued to Placement Agent in connection with a private placement, the initial closing of which was held on May 31, 2007 | | 8-K | | 10.22 | 6/5/2007 |
| 10.4 † | Employment Agreement dated May 31, 2007, between WaferGen Bio-systems, Inc. and Alnoor Shivji | | 8-K | | 10.26 | 6/5/2007 |
| 10.5 | Securities Purchase Agreement, dated May 19, 2008, by and among WaferGen Bio-systems, Inc. and the purchasers identified on the signature pages thereto | | 8-K | | 10.1 | 5/21/2008 |
| 10.6 | Form of Common Stock Purchase Warrant issued to investors identified in the Securities Purchase Agreement dated May 19, 2008 | | 8-K | | 10.2 | 5/21/2008 |
| 10.7 † | WaferGen Bio-systems, Inc. 2008 Stock Incentive Plan | | 8-K | | 10.1 | 7/3/2008 |
| 10.8 † | Form of Non-Qualified Stock Option award under 2008 Stock Incentive Plan | | 10-K | 12/31/2008 | 10.35 | 3/27/2009 |
| 10.9 | Share Subscription Agreement and Shareholders' Agreement dated May 8, 2008, by and among WaferGen Bio-systems, Inc., Malaysian Technology Development Corporation Sdn. Bhd. and WaferGen Biosystems (M) Sdn. Bhd. | | 10-Q | 9/30/2008 | 10.1 | 11/14/2008 |
| 10.10 | Put Agreement dated May 28, 2008, by and among WaferGen Bio-systems, Inc. and Holders of the Series A Redeemable Convertible Preference Shares in WaferGen Biosystems (M) Sdn. Bhd. | | 10-Q | 9/30/2008 | 10.2 | 11/14/2008 |
| 10.11 † | Letter Agreement dated January 16, 2009, by and between WaferGen Bio-systems, Inc. and Alnoor Shivji | | 10-K | 12/31/2008 | 10.39 | 3/27/2009 |
| 10.12 | Form of WaferGen Bio-systems, Inc. Distribution Agreement | | 10-K | 12/31/2008 | 10.42 | 3/27/2009 |
| 10.13 | Share Subscription Agreement dated April 3, 2009, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd., Primar Mahawangsa Sdn. Bhd. and Expedient Equity Ventures Sdn. Bhd. | | 8-K | | 10.1 | 4/14/2009 |

| Exhibit Number | Exhibit Description | Filed Herewith | Incorporated by Reference | | | |
|-------------------|--|-------------------|---------------------------|------------------|---------|-------------|
| | | | Form | Period Ending | Exhibit | Filing Date |
| 10.14 | Put Agreement dated April 3, 2009, by and among WaferGen Bio-systems, Inc. and Holders of Series B Redeemable Convertible Preference Shares in WaferGen Biosystems (M) Sdn. Bhd. | | 8-K | | 10.2 | 4/14/2009 |
| 10.15 | Deed of Adherence to the Share Subscription and Shareholders' Agreement dated May 8, 2008, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd., Primar Mahawangsa Sdn. Bhd., Expedient Equity Ventures Sdn. Bhd. and Malaysian Technology Development Corporation Sdn. Bhd. | | 10-Q | 3/31/2009 | 10.4 | 5/12/2009 |
| 10.16 | Form of Subscription Agreement between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the June and August 2009 private placement offering of units of securities | | 10-Q | 6/30/2009 | 10.5 | 8/10/2009 |
| 10.17 | Form of Warrants to purchase shares of Common Stock, issued June 16, 2009, to investors in the June and August 2009 private placement offering of units of securities | | 10-Q | 6/30/2009 | 10.6 | 8/10/2009 |
| 10.18 | Registration Rights Agreement between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the June and August 2009 private placement offering of units of securities | | 10-Q | 6/30/2009 | 10.7 | 8/10/2009 |
| 10.19 | Form of Warrant to purchase shares of Common Stock, issued to Spencer Trask Ventures, Inc. and certain related parties in connection with the June and August 2009 private placement offering of units of securities | | 10-Q | 6/30/2009 | 10.8 | 8/10/2009 |
| 10.20 | Share Subscription Agreement dated July 1, 2009, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd. and Kumpalan Modal Perdana Sdn. Bhd. | | 10-Q | 9/30/2009 | 10.1 | 11/13/2009 |
| 10.21 | Put Agreement dated July 1, 2009, by and among WaferGen Bio-systems, Inc. and Holders of Series B Redeemable Convertible Preference Shares in WaferGen Biosystems (M) Sdn. Bhd. | | 10-Q | 9/30/2009 | 10.2 | 11/13/2009 |
| 10.22 | Deed of Adherence dated July 1, 2009, to the Share Subscription and Shareholders' Agreement dated May 8, 2008, and the Share Subscription Agreement dated April 3, 2009, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd., Primar Mahawangsa Sdn. Bhd., Expedient Equity Ventures Sdn. Bhd., Malaysian Technology Development Corporation Sdn. Bhd. and Kumpalan Modal Perdana Sdn. Bhd. | | 10-Q | 9/30/2009 | 10.4 | 11/13/2009 |
| 10.23 † | Employment Agreement, effective October 29, 2009, by and between WaferGen Bio-systems, Inc. and Mona Chadha | | 10-Q | 9/30/2009 | 10.5 | 11/13/2009 |
| 10.24 | Lease Agreement by and between WaferGen, Inc. and LBA Realty Fund III-Company VII, LLC dated October 22, 2009 | | 10-Q | 9/30/2009 | 10.6 | 11/13/2009 |
| 10.25 | Form of Subscription Agreement between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the December 2009 and January 2010 private placement offering of units of securities | | S-1 | | 10.58 | 3/2/2010 |
| 10.26 | Form of Warrants to purchase shares of Common Stock, issued December 23, 2009, to investors in the December 2009 and January 2010 private placement offering of units of securities | | S-1 | | 10.59 | 3/2/2010 |
| 10.27 | Registration Rights Agreement, dated December 23, 2009, between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the December 2009 and January 2010 private placement offering of units of securities | | S-1 | | 10.60 | 3/2/2010 |
| 10.28 | Securities Purchase Agreement, dated July 1, 2010, between WaferGen Bio-systems, Inc. and each investor party thereto in connection with the July 2010 offering of units of securities | | 8-K | | 10.1 | 7/8/2010 |

| Exhibit Number | Exhibit Description | Filed Herewith | Incorporated by Reference | | | |
|----------------|---|----------------|---------------------------|---------------|---------|-------------|
| | | | Form | Period Ending | Exhibit | Filing Date |
| 10.29 | Form of Warrants to purchase shares of Common Stock, issued July 7, 2010, to investors in the July 2010 offering of units of securities | | 8-K | | 4.1 | 7/8/2010 |
| 10.30 | Form of Warrant to purchase shares of Common Stock, issued July 7, 2010, to placement agents and certain related parties in connection with the July 2010 offering of units of securities | | 10-Q | 6/30/2010 | 10.3 | 8/16/2010 |
| 10.31 † | WaferGen Bio-systems, Inc. 2008 Stock Incentive Plan, as amended | | 8-K | | 10.1 | 9/22/2010 |
| 10.32 † | Employment Agreement, effective September 3, 2010, by and between WaferGen Bio-systems, Inc. and Donald Huffman | | 10-Q | 9/30/2010 | 10.2 | 11/15/2010 |
| 10.33 | Loan and Security Agreement, dated December 7, 2010, between Oxford Finance Corporation, WaferGen Inc. and WaferGen Bio-systems, Inc. | | 8-K | | 10.1 | 12/13/2010 |
| 10.34 | Warrant to purchase shares of Common Stock, issued December 7, 2010, to Oxford Finance Corporation | | 8-K | | 10.2 | 12/13/2010 |
| 10.35 | Share Subscription Agreement dated December 14, 2010, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd. and Malaysian Technology Development Corporation Sdn. Bhd. | | 8-K | | 10.1 | 12/15/2010 |
| 10.36 | Put Agreement dated December 14, 2010, by and among WaferGen Bio-systems, Inc. and Malaysian Technology Development Corporation Sdn. Bhd. | | 8-K | | 10.2 | 12/15/2010 |
| 10.37 | Amended and Restated Shareholders' Agreement dated December 14, 2010, by and among WaferGen Bio-systems, Inc., WaferGen Biosystems (M) Sdn. Bhd., Malaysian Technology Development Corporation Sdn. Bhd. and Prima Mahawangsa Sdn. Bhd. | | 8-K | | 10.3 | 12/15/2010 |
| 10.38 | Purchase Agreement, dated May 25, 2011, between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the May 2011 private placement offering of units of securities | | 8-K | | 10.1 | 6/1/2011 |
| 10.39 | Registration Rights Agreement, dated May 27, 2011, between WaferGen Bio-systems, Inc., and the investors party thereto in connection with the May 2011 private placement offering of units of securities | | 8-K | | 10.2 | 6/1/2011 |
| 10.40 | Form of Convertible Promissory Note, dated May 27, 2011, to investors in the May 2011 private placement offering of units of securities | | 8-K | | 10.3 | 6/1/2011 |
| 10.41 | Form of Warrants to purchase shares of Common Stock, issued May 27, 2011, to investors in the May 2011 private placement offering of units of securities | | 8-K | | 10.4 | 6/1/2011 |
| 10.42 | Letter Agreement, dated as of May 27, 2011, by and among WaferGen Bio-systems, Inc. and the investors signatory thereto | | 10-Q | 6/30/2011 | 10.1 | 9/12/2011 |
| 10.43 | Omnibus Amendment No. 1 to Convertible Promissory Notes, dated as of September 30, 2011 by and among WaferGen Bio-systems, Inc. and the holder signatories thereto | | 8-K | | 10.1 | 10/8/2011 |
| 10.44 | Letter Agreement, dated as of September 30, 2011 by and among WaferGen Bio-systems, Inc. and the investors signatory thereto | | 8-K | | 10.3 | 10/8/2011 |
| 21.1 | Subsidiaries of the Registrant | | S-1 | | 21.1 | 10/27/11 |
| 23.1 | Letter of Consent from Independent Registered Public Accounting Firm, Rowbotham & Company LLP | | S-1 | | 23.1 | 10/27/11 |
| 23.2 | Letter of Consent from McDonald Carano Wilson LLP (included in Exhibit 5.1) | | S-1 | | 23.2 | 10/27/11 |

† Indicates a management contract or compensatory plan or arrangement.