SunEdison Semiconductor Pte. Ltd. Form S-1/A
March 21, 2014
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As filed with the Securities and Exchange Commission on March 21, 2014

Registration No. 333-191052

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 4

TO

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

SUNEDISON SEMICONDUCTOR PTE. LTD.*

(Exact name of registrant as specified in its charter)

Singapore

(State or other jurisdiction of incorporation or organization)

3674

(Primary Standard Industrial Classification Code Number)

11 Lorong 3 Toa Payoh

Singapore 319579

Not Applicable (I.R.S. Employer Identification No.)

(65) 6681-9300

(Address, including zip code and telephone number, including area code, of registrant s principal executive offices)

C T Corporation System

111 Eighth Avenue

New York, New York 10011

(212) 590-9070

(Name, address, including zip code and telephone number, including area code, of agent for service)

Copies of all communications, including communications sent to agent for service, should be sent to:

Dennis M. Myers Kirkland & Ellis LLP 300 North LaSalle Chicago, Illinois 60654 (312) 862-2000 Christopher L. Kaufman Tad J. Freese Latham & Watkins LLP 140 Scott Drive Menlo Park, California 94025 (650) 328-4600

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

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, 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, please 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 Exchange Act (Check one):

Large accelerated filer "

Accelerated filer "

Non-accelerated filerx
(Do not check if a smaller reporting company)

Smaller reporting company "

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities

to be Registered Ordinary Shares, no par value Proposed Maximum
Aggregate Offering Price (1) (2)
\$250,000,000

Amount of Registration Fee (3) \$34,100

- (1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
- (2) Includes the offering price of any additional ordinary shares that the underwriters have the option to purchase.
- (3) This amount was previously paid in connection with the filing of this Registration Statement.

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 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

^{*}SunEdison Semiconductor Pte. Ltd. is the successor registrant to SunEdison Semiconductor, Inc. as its ultimate parent company. Prior to the effective date of this Registration Statement, SunEdison Semiconductor Pte. Ltd. will convert from a Singapore private limited company into a Singapore public limited company. Upon such conversion, the registrant will be known as SunEdison Semiconductor Limited.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not

permitted.

PROSPECTUS

Subject to Completion

Preliminary Prospectus dated March 21, 2014

shares

SunEdison Semiconductor Limited

Ordinary Shares

This is the initial public offering of the ordinary shares of SunEdison Semiconductor Limited. We are selling of our ordinary shares.

Prior to this offering, there has been no public market for our ordinary shares. The initial public offering price of our ordinary shares is expected to be between \$\\$ and \$\\$ per share. We have applied to list our ordinary shares on the NASDAQ Global Select Market under the symbol SEMI.

Investing in our ordinary shares involves risks that are described in the <u>Risk Factors</u> section beginning on page 16 of this prospectus.

We are an emerging growth company as defined in Section 2(a)(19) of the Securities Act of 1933, as amended, or the Securities Act, and, as such, are allowed to provide in this prospectus more limited disclosures than an issuer that would not so qualify. In addition, for so long as we remain an emerging growth company, we will qualify for certain limited exceptions from investor protection laws such as the Sarbanes-Oxley Act of 2002. Please read Risk Factors Risks Related to this Offering and Our Ordinary Shares We are an emerging growth company and may elect to comply with reduced public company reporting requirements, which could make our ordinary shares less attractive to investors.

	Per Share	Total
Public offering price	\$	\$
Underwriting discounts(1)	\$	\$
Proceeds, before expenses, to us	\$	\$

(1) We refer you to Underwriting beginning on page 158 of this prospectus for additional information regarding underwriting compensation.

The underwriters may also exercise their option to purchase up to additional shares from us at the initial public offering price, less the underwriting discount, for a period of 30 days after the date of this prospectus.

Samsung Fine Chemicals Co., Ltd. and Samsung Electronics Co., Ltd. have agreed to purchase \$100 million and \$ million, respectively, of our ordinary shares in separate private placements at a price per share equal to the public offering price. Our parent, SunEdison, Inc., will be our majority shareholder following the completion of this offering and the private placements. Samsung Fine Chemicals Co., Ltd. is a joint venture partner of a subsidiary of SunEdison, Inc. in SMP Ltd. Samsung Electronics Co., Ltd. is one of our customers and our joint venture partner in MEMC Korea Company. As consideration for the issuance of the ordinary shares, Samsung Fine Chemicals Co., Ltd. will make an aggregate cash investment in us of \$100 million and Samsung Electronics Co., Ltd. will transfer to us its 20% interest in MEMC Korea Company. These share purchases will close concurrently with this offering. The sale of such shares will not be registered under the Securities Act. The private placements are subject to certain closing conditions. See Prospectus Summary Private Placements and Related Transactions.

Neither the Securities and Exchange Commission, or SEC, nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The shares will be ready for delivery on or about , 2014.

Deutsche Bank Securities

Goldman, Sachs & Co.

Wells Fargo Securities

The date of this prospectus is , 2014.

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We have not and the underwriters have not authorized anyone to provide you with any information other than that contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We are offering to sell, and seeking offers to buy, our ordinary shares only in jurisdictions where such offers and sales are permitted. The information in this prospectus or any free writing prospectus is accurate only as of its date, regardless of its time of delivery or the time of any sale of shares of our ordinary shares. Our business, financial condition, results of operations and prospects may have changed since that date.

The name and mark, SunEdison, Inc., and other trademarks, trade names and service marks of SunEdison, Inc. appearing in this prospectus are the property of SunEdison, Inc. Prior to the completion of this offering, SunEdison Semiconductor Limited and other trademarks, trade names and service marks of SunEdison Semiconductor Limited appearing in this prospectus are the property of SunEdison, Inc., and after the completion of this offering, SunEdison Semiconductor Limited and other trademarks, trade names and service marks of SunEdison Semiconductor Limited appearing in this prospectus will be the property of SunEdison Semiconductor Limited. This prospectus also contains

additional trade names, trademarks and service marks belonging to SunEdison, Inc. and to other companies. We do not intend our use or display of other parties trademarks, trade names or service marks to imply, and such use or display should not be construed to imply, a relationship with, or endorsement or sponsorship of us by, these other parties.

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PROSPECTUS SUMMARY

The following is a summary of material information discussed in this prospectus. This summary may not contain all the details concerning our business, our ordinary shares or other information that may be important to you. You should carefully review this entire prospectus, including the Risk Factors section and our financial statements and the related notes included elsewhere in this prospectus, before making an investment decision. As used in this prospectus, unless the context otherwise indicates, the references to (i) our business, we, our or us or similar terms refer to the semiconductor materials business as operated as a business segment of SunEdison, Inc., or SunEdison, for periods prior to the Transactions (as described below in Structure and Formation of Our Company), and to SunEdison Semiconductor Limited, together with, where appropriate, its consolidated subsidiaries, for periods after the completion of the Transactions, and (ii) SSL refer to SunEdison Semiconductor Limited exclusive of its subsidiaries. References in this prospectus to S\$ refer to Singapore dollars. Unless otherwise indicated or the context otherwise requires, the financial and operating data included in this prospectus reflect the combined semiconductor materials business of SunEdison that will be owned by SunEdison Semiconductor Limited after the completion of the Transactions and is otherwise as of December 31, 2013.

Our Company

We are a global leader in the development, manufacture and sale of silicon wafers to the semiconductor industry. Wafers are used as the base substrate for nearly all semiconductor devices, which in turn provide the foundation for the entire electronics industry. Our business was established in 1959 and was known during most of our history as MEMC Electronic Materials, Inc., or MEMC. We have developed a broad product portfolio, an extensive global manufacturing footprint, process technology expertise and supply chain flexibility, while increasing our capital efficiency and maintaining a lean operating culture.

Throughout our over 50 years of operations, we have pioneered a number of semiconductor industry firsts, including the development of the dislocation-free Czochralski, or CZ, silicon crystal growth process and the chemical-mechanical planarization, or CMP, process, as well as the initial production and commercialization of 100mm and 200mm semiconductor wafers. More recently, we have been a leader in the development of advanced substrates such as epitaxial, or EPI, wafers and wafers for the silicon-on-insulator, or SOI, market, which enable advanced computing and communications applications.

We primarily sell our products to all of the major semiconductor manufacturers in the world, including integrated device manufacturers and pure-play semiconductor foundries, and to a lesser extent, leading companies that specialize in wafer customization. During 2013, our largest customers were Samsung, Taiwan Semiconductor Manufacturing Company, or TSMC, and STMicroelectronics. We operate facilities in major semiconductor manufacturing regions throughout the world, including Taiwan, Malaysia, South Korea, Italy, Japan and the United States. We have chosen to locate our manufacturing facilities in regions that offer both low operating costs and close proximity to our customers to facilitate collaboration on product development activities and shorten product delivery times.

The market for semiconductor wafers is large and growing. According to Gartner, Inc., or Gartner, the merchant semiconductor silicon wafer market in 2012 was approximately \$9 billion worldwide and is expected to grow at a 5.1% compound annual growth rate, or CAGR, from 2012 to 2017, reaching approximately \$12 billion by 2017. This growth in semiconductor wafer demand has been largely attributable to the proliferation of mobile devices such as smart phones and tablets. These devices require semiconductors that are energy efficient, low cost, high performance and highly integrated into a small footprint. Semiconductors offering those characteristics increasingly require EPI and SOI wafers. We believe that the combination of our process technology expertise in

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EPI and SOI wafer manufacturing with our capital efficiency provides us with significant opportunities as the markets for EPI and SOI wafers continue to grow.

The semiconductor wafer industry has undergone significant consolidation over the past 20 years, from more than 20 suppliers in the 1990s to only five major suppliers today, including Shin-Etsu Handotai, SUMCO Corporation, Siltronic AG, LG Siltron and us, which suppliers accounted for approximately 90% of all semiconductor wafer sales in 2012, according to Gartner. This consolidation is due in large part to the significant increase in the capital investment and manufacturing capacity needed to compete effectively. We have expanded our market share by revenue from 8% in 2008 to 10% in 2012, according to Gartner. We believe this improvement is in large part the result of our emphasis on technology and product innovation and customer service, as well as consistently delivering high quality wafers that meet our customers evolving requirements. We believe we are well positioned to continue to expand our market share and capitalize on the increasing demand for more advanced wafer products. We generated net sales of \$920.6 million, \$934.2 million and \$1,198.3 million, net (loss) income attributable to SSL of \$(57.7) million, \$121.3 million and \$(557.9) million and Adjusted EBITDA of \$74.6 million, \$74.9 million and \$170.2 million, in 2013, 2012 and 2011, respectively. See Summary Historical and Pro Forma Financial Data for the definition of Adjusted EBITDA, the reason for its inclusion and a reconciliation from net (loss) income attributable to SSL to Adjusted EBITDA.

Industry Overview

Semiconductor devices are at the core of modern electronics. According to Gartner, the total semiconductor market worldwide was \$300 billion in 2012. These devices include microprocessors, memory, analog, mixed-signal and radio frequency, or RF, integrated circuits, discrete, application specific integrated circuits, microelectromechanical systems, or MEMS, and image sensors. Recent semiconductor growth has been largely attributable to the proliferation of mobile devices, which has driven the need for low cost, high performance semiconductors that provide efficient power consumption and a reduced footprint. In order to meet these demands, technology innovation in the semiconductor industry has continued at a strong pace over the past decade, resulting in shrinking process geometries, larger wafer sizes, more stringent technical specifications and the introduction of advanced substrates and device structures. In addition to continued growth in the mobile device market, future semiconductor industry growth is expected to be further driven by new and emerging markets and applications, such as in the healthcare and automotive industries, which are increasingly incorporating advanced technologies in their services and products.

Semiconductor wafers are increasingly required to meet specific performance characteristics. For example, semiconductors used in applications such as mobile devices and cloud infrastructure are increasingly requiring EPI wafers, which enable lower power consumption due to their near perfect surface characteristics. According to Gartner, the epitaxial semiconductor silicon wafer market is expected to grow from \$3.6 billion in 2012 to \$4.9 billion in 2017, representing a 6.5% CAGR. Similarly, demand for SOI wafers is growing as a result of the ability of SOI wafers to improve switching speeds and enhance the performance of RF devices such as power amplifiers, switches and sensors. According to the SOI Industry Consortium, the total available market for SOI wafers is expected to double over the next five years, driven by the increased penetration in mobile system-on-chips and RF devices. As a semiconductor wafer manufacturer focused on advanced EPI and SOI product solutions, we believe we are well positioned to capitalize on the growth opportunities resulting from industry consolidation and the increasing demand for EPI and SOI wafers.

Our Strengths

Our strengths as a manufacturer of semiconductor wafers include the following:

History of product innovation and process technology expertise. We have a more than 50 year history, under the MEMC brand, of product innovation, including achieving several major advancements in the semiconductor wafer industry, such as the development of the dislocation-free CZ silicon crystal growth process and the CMP process, as well as the initial production and commercialization of 100mm and 200mm semiconductor wafers. We have developed advanced substrates such as EPI wafers and, more recently, SOI wafers to maintain our history of product innovation. We have also developed significant technology expertise in wafer manufacturing processes, including diamond wire cutting, integrated software-enabled tooling and flexible equipment processes supporting the manufacture of semiconductor wafers with various diameters.

Broad product portfolio. We have developed a broad product portfolio. Our products include polished, EPI, SOI, perfect silicon and magic denuded zone, or MDZ, wafers ranging in diameter from 100mm to 300mm. Our process capabilities provide us with the ability to customize our products to address the specific performance characteristics required by our customers. For example, as one of only three primary SOI wafer suppliers, we are capable of satisfying all of our customers—wafer requirements in microprocessors, memory, analog, mixed-signal and RF integrated circuits, discrete, application specific integrated circuits, MEMS and image sensors.

Extensive global footprint with close customer collaboration. We have an established global manufacturing network consisting of eight facilities located in Taiwan, Malaysia, South Korea, Italy, Japan and the United States. We have located our facilities in areas that offer a combination of low operating costs and highly educated work forces in close proximity to our customers. This local presence enables us to collaborate with our customers on product design and development activities and shorten product delivery and response times. Our diverse global footprint also enables us to mitigate risk in the event of natural disasters or other occurrences that can disrupt manufacturing.

Established relationships with blue chip customers. We work with all of the major semiconductor device manufacturers in the world, including integrated device manufacturers and pure-play semiconductor foundries. Our continued focus on developing strong customer relationships has resulted in several awards from our key customers. For example, we were the only company in 2012 to receive supplier excellence awards from each of Samsung, TSMC and Analog Devices based on our performance, quality, service and support. We also received a supplier excellence award from TSMC in 2013. We collaborate with our customers on their research and development, or R&D, activities, allowing us to develop wafer products that meet their product design expectations rapidly and efficiently.

Company-wide focus on capital efficiency and maintaining a lean operating culture. We have implemented several initiatives since 2009 designed to rationalize our use of resources, optimize those resources for the most attractive market opportunities and manage our production capacity to meet demand efficiently. Our engineers understanding of both the science and operation of the tools within our factories enables us to streamline equipment controls, software interfaces and operational parameters to improve the productivity of our equipment. We have also designed our manufacturing processes to be flexible and scalable with low to moderate additional capital investment necessary to pursue new opportunities or increase capacity. We continue to focus on improving our equipment productivity through our Overall Equipment Effectiveness program, which has improved our safety, customer satisfaction and on-time delivery and reduced facility disruptions.

Experienced management team with extensive expertise. Our top eight senior managers average 25 years of relevant experience from multiple segments of the semiconductor industry, having joined us from leading technology companies including General Electric, Intel and Motorola. In addition, we have a large and

technologically proficient professional staff with approximately 720 engineers, of whom over 125 focus solely on R&D and approximately 45 have Ph.Ds.

Our Business Strategy

Our goal is to continue to be a market leader and increase our market share in the large and growing semiconductor wafer industry. Key elements of our strategy include:

Extending our product and process technology leadership. We are focused on developing leading edge technologies for the semiconductor wafer market. As our customers needs evolve with decreasing transistor sizes, increasing degrees of integration and ongoing pressures for cost reduction, the requirements and specifications for semiconductor wafers are also evolving. We are investing in new product and process technologies to be able to offer products with enhanced features, such as flatness, uniformity, resistivity and reduced defects. For example, we are making substantial investments to further our 200mm and 300mm SOI product offerings for below 20 nanometer process technologies, as well as next generation 300mm EPI wafers with advanced performance characteristics for wireless applications.

Increasing our customer penetration and market share. We intend to increase our customer penetration and market share by enhancing our global sales, design and technical support organizations and leveraging our broad product portfolio. We are also focused on capitalizing on attractive new opportunities with current and new customers in emerging applications. For example, we are working closely with customers to design product solutions that enable continued transistor scaling and include 3-D transistors and Fully Depleted SOI planer transistors, as well as to address process issues related to the introduction of new materials in wafer fabrication and advanced lithography. In addition, we are developing wafer solutions that enable integration of multiple functions, such as logic, memory and analog, on the same chip.

Continuing to deliver high quality customer service. We intend to continue our increased focus on delivering high quality customer service and manufacturing flexibility by leveraging our local presence that results from our diverse geographic footprint. We are focused on enhancing our established quality assurance programs and dedicated services and support staff in order to continue responding quickly to changing demands and product cycles of our customers.

Maintaining focus on operational improvements. We intend to continue our focus on maintaining a lean operating environment and capital efficiency. We believe our Overall Equipment Effectiveness program and other operational improvements have enabled us to improve lead times across the supply chain, as well as our performance with respect to safety, customer satisfaction and on-time delivery and reduced facility disruptions. These improvements have freed up capacity, reduced costs and significantly improved equipment reliability. Our lean operating structure positions us to add production capacity as needed at low to moderate incremental capital expense by optimizing equipment utilization.

Capitalizing on the benefits of being an independent entity. We believe that being a separately traded public company will enable us to be a more focused business with the ability to target our investment and research initiatives solely on semiconductor wafers. We expect our independence will also allow us to align the interests and incentives of our employees exclusively with the success of our business and better position us for further consolidation in the industry.

Private Placements and Related Transactions

Samsung Fine Chemicals Co., Ltd., or Samsung Fine Chemicals, and Samsung Electronics Co., Ltd., or Samsung Electronics, have agreed to purchase \$100 million and \$ million, respectively, of our ordinary

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shares in separate private placements at a price per share equal to the public offering price. Samsung Fine Chemicals is a joint venture partner of a subsidiary of SunEdison in SMP Ltd., or SMP. Samsung Electronics is one of our customers and our joint venture partner in MEMC Korea Company, or MKC. As consideration for the issuance of the ordinary shares, (i) Samsung Fine Chemicals will make an aggregate cash investment in us of \$100 million and (ii) Samsung Electronics will transfer to us its 20% interest in MKC. These share purchases will close concurrently with this offering. The private placements are subject to certain closing conditions, including the receipt of applicable regulatory approvals, as described in Certain Relationships and Related Party Transactions Private Placements and Related Transactions. These share purchases will close concurrently with this offering.

Throughout this prospectus, we collectively refer to Samsung Fine Chemicals and Samsung Electronics as the Samsung Purchasers and to the foregoing transactions as the Samsung Private Placements.

In connection with the Samsung Private Placements, we have also entered into a wafer purchase and sale agreement with Samsung Electronics. See Certain Relationships and Related Party Transactions Wafer Purchase and Sale Agreement.

Following the completion of the Formation Transactions described below in Structure and Formation of Our Company, including the contribution to us by SunEdison of a 35% interest in SMP, and the Samsung Private Placements, SMP will be owned 35% by us, 50% by a subsidiary of SunEdison and 15% by Samsung Fine Chemicals, and MKC will be 100% owned by us. SMP owns a polysilicon manufacturing facility currently under construction in South Korea and MKC owns a manufacturing facility in South Korea that produces 200mm and 300mm semiconductor wafers. The SMP polysilicon facility is expected to be completed in the second half of 2014. We believe these transactions will create financial and strategic value for us by introducing a source of polysilicon that we partially own, and which we expect will provide competitive prices and reduce the risk of supply interruptions. The Samsung Private Placements will also result in us having 100% ownership and control of the silicon wafer manufacturing capabilities at the MKC manufacturing facility, which we believe will give us additional flexibility to respond quickly to changes in the silicon wafer industry.

In addition, pursuant to an agreement we expect to enter into with Samsung Fine Chemicals and SunEdison in connection with the closing of the Samsung Private Placements, we will be obligated to sell additional ordinary shares having an aggregate value (based on the initial public offering price) of up to 3.5 billion South Korean won, or , 2014, to Samsung Fine Chemicals following the closing million at currency exchange rates as of of the Samsung Private Placements in the event construction costs associated with the SMP facility exceed a specified amount, subject to a cap. The number of additional ordinary shares that we will be obligated to sell to Samsung Fine Chemicals will depend upon the extent to which the actual construction costs exceed 410 billion South Korean won but are less than 430 billion South Korean won, or approximately \$ to \$ at currency exchange rates as of , 2014. Assuming an initial public offering price of \$ per share, which is the midpoint of the price range listed on the cover page of this prospectus, and currency exchange rates as of , 2014, the maximum number of additional ordinary shares that we will be obligated to sell to Samsung Fine Chemicals ordinary shares. The sale of these shares would not be registered under the Securities Act. See Certain Relationships and Related Party Transactions Private Placements and Related Transactions.

Structure and Formation of Our Company

Overview

Prior to the completion of this offering, SSL is a wholly-owned subsidiary of SunEdison. Prior to or simultaneously with the completion of this offering, we and SunEdison will engage in a series of transactions which are designed to

transfer the ownership of the semiconductor materials business as currently operated by

SunEdison to us, facilitate this offering and enable us to raise necessary capital to pay SunEdison for such asset transfers and repay our existing indebtedness, including intercompany indebtedness and certain trade accounts owed to SunEdison. We collectively refer to the transactions undertaken as part of our initial formation as summarized below throughout this prospectus as the Formation Transactions:

SSL was incorporated as a private limited company in the Republic of Singapore on December 20, 2013 under the name SunEdison Semiconductor Pte. Ltd. Prior to the completion of this offering, SunEdison Semiconductor Pte. Ltd. will convert to a Singapore public limited company to be known as SunEdison Semiconductor Limited. SSL is the ultimate parent company of both SunEdison Semiconductor, LLC, which is our only U.S. operating subsidiary, and our non-U.S. subsidiaries.

Effective as of December 31, 2013, SunEdison contributed all of the outstanding capital stock of its subsidiaries that own and operate its semiconductor materials business, other than a 40% interest held by a subsidiary of SunEdison in MKC, and all of the assets primarily related to its semiconductor material business and held by SunEdison or its subsidiaries to SSL in exchange for aggregate consideration consisting of ordinary shares, intercompany notes in an aggregate principal amount of \$million and the assumption by SSL of \$million of liabilities associated with the semiconductor materials business.

In January 2014, SunEdison caused its subsidiary to contribute to SSL its 40% interest in MKC in exchange for consideration consisting of ordinary shares.

On March 20, 2014, SunEdison agreed to acquire a 35% interest in SMP held by Samsung Fine Chemicals for a cash purchase price of 140 billion South Korean won, subject to increase based on construction costs calculated prior to the closing. Prior to the completion of this offering, SunEdison will contribute this 35% interest in SMP to us in exchange for consideration consisting of ordinary shares.

We will enter into transition services, intellectual property licensing, tax sharing and other commercial agreements with SunEdison and certain of its subsidiaries. See Certain Relationships and Related Party Transactions.

We collectively refer to the transactions undertaken to finance the Formation Transactions and otherwise provide us with future liquidity as summarized below throughout this prospectus as the Financing Transactions:

\$ million of the net proceeds from this offering together with \$ million of borrowings under a new senior secured term loan from financial institutions and \$100 million from the cash investment by Samsung Fine Chemicals in connection with the Samsung Private Placements will be used to repay in full the intercompany notes issued to SunEdison in connection with the asset transfers contemplated as part of the Formation Transactions.

We will use approximately \$\\$\\$ million of the net proceeds from this offering to repay existing third party indebtedness that we associate with the semiconductor materials business. The third party indebtedness consists of long-term notes bearing a fixed interest rate of 2.2% owed to a bank by our Japanese subsidiary. The notes mature at various times between 2014 and 2017, and the aggregate outstanding principal amount of the notes was \$10.4 million as of December 31, 2013.

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We will enter into a new senior secured revolving credit facility with financial institutions that will provide for up to approximately \$50.0 million of borrowings for working capital purposes. For ease of reference, we sometimes collectively refer to this offering, the Formation Transactions, the Financing Transactions and the Samsung Private Placements throughout this prospectus as the Transactions.

We are pursuing this offering and the other Transactions at the direction of SunEdison. We believe that SunEdison expects that it will be able to use the net proceeds it receives from this offering and related Transactions to accelerate its solar energy development projects. Additionally, we believe SunEdison is undertaking the Transactions in an effort to maximize the value of its businesses by enabling each business to focus on its respective core competencies, key markets and customers, to optimize its capital structure and to enhance its access to capital and provide investors with better transparency into each underlying business. We believe that being a separately traded public company will enable us to: (1) be a more focused business with the ability to target our investment and research initiatives solely on semiconductor wafers; (2) align the interests and incentives of our employees exclusively with the success of our business; and (3) compete more effectively in light of consolidation in the industry. We are entering into the new senior secured term loan and senior secured revolving credit facility in order to provide us with sources of future liquidity for growing our business, as well as to fund a portion of the cash repayment of the intercompany notes issued to SunEdison in connection with the asset transfers contemplated as part of the Formation Transactions.

Upon completion of the Transactions, including the Samsung Private Placements, purchasers of our ordinary shares in this offering will own ordinary shares representing % of our outstanding ordinary shares (or % if the underwriters option to purchase additional shares is exercised in full), SunEdison will own ordinary shares representing % of our outstanding ordinary shares (or % if the underwriters option to purchase additional shares is exercised in full), and the Samsung Purchasers will own ordinary shares representing % of our outstanding ordinary shares (or % if the underwriters option to purchase additional shares is exercised in full).

This offering is conditioned upon the completion of the Samsung Private Placements and our entry into the new senior secured term loan and senior secured revolving credit facility prior to or concurrently with this offering.

Sources and Uses of Funds

Sources of Funds

The following table illustrates the estimated sources and uses of the funds necessary to complete the Transactions, assuming they were completed as of December 31, 2013. Actual amounts may vary from estimated amounts.

	CSCS OF T UNUS					
(in millions)						
	Cash payment to SunEdison to repay in full					
\$	intercompany notes (4)	\$				
	Repayment of subsidiary bank					
	indebtedness (5)					
100.0	Cash to balance sheet (6)					
	Estimated fees and expenses (7)					
	\$	(in millions) Cash payment to SunEdison to repay in full intercompany notes (4) Repayment of subsidiary bank indebtedness (5) 100.0 Cash to balance sheet (6)				

Uses of Funds

Total sources \$ Total uses \$

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- (1) In connection with the Financing Transactions, we intend to enter into new senior secured credit facilities that will include a senior secured revolving credit facility for borrowings of up to approximately \$50.0 million. We do not expect to have any outstanding borrowings under this senior secured revolving credit facility upon completion of this offering. We currently do not have commitments from any prospective lenders with respect to the new senior secured credit facilities but expect to obtain such commitments prior to the completion of this offering. See Description of Certain Indebtedness New Senior Secured Credit Facilities.
- (2) Represents the cash investment by Samsung Fine Chemicals in connection with the Samsung Private Placements.
- (3) Assumes an initial public offering price of \$ per ordinary share, which is the midpoint of the price range listed on the cover page of the prospectus.
- (4) \$ million of the net proceeds from this offering together with \$ million of borrowings under our new senior secured term loan and \$100 million from the cash investment by Samsung Fine Chemicals in connection with the Samsung Private Placements will be used to fund the cash payment to SunEdison to repay in full the intercompany notes. The cash repayment of the notes and the ordinary shares to be issued to SunEdison, together with the assumption by SSL of \$ million of liabilities associated with the semiconductor materials business, represent the consideration paid to SunEdison in exchange for the assets of its semiconductor materials business contributed to SSL.
- (5) Consists of long-term notes bearing a fixed interest rate of 2.2% owed to a bank by our Japanese subsidiary. The notes mature at various times between 2014 and 2017, and the aggregate outstanding principal amount of the notes was \$10.4 million as of December 31, 2013.
- (6) We may use such net proceeds for working capital and other general corporate purposes. See Use of Proceeds.
- (7) The estimated fees and expenses include underwriting discounts and commissions and our estimated legal, accounting and other expenses associated with the Transactions.

Risk Factors

There are a number of risks that you should understand before making an investment decision regarding this offering. These risks are discussed more fully in the section entitled Risk Factors following this prospectus summary. These risks include, but are not limited to:

our business depends on the semiconductor device industry, and when that industry experiences one of its cyclical downturns, our sales are likely to decrease and we could be forced to reduce our prices without being able to reduce costs, including fixed costs, all of which could materially adversely affect our business, financial condition and results of operations;

if we fail to meet changing customer demands or achieve market acceptance for new products, we may lose customers and our sales could suffer;

a significant reduction in, or loss of, purchases by any of our top customers could materially adversely affect our business, financial condition and results of operations;

semiconductor wafer prices have been volatile in recent years. If we are unable to reduce our manufacturing costs and operating expenses in response to declining prices, we may not be able to compete effectively;

we face intense competition in the industry in which we operate, including from competitors that have a greater market share than we do, which could materially adversely affect our business, financial condition and results of operations;

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we are controlled by SunEdison, whose interests may conflict with yours, and this concentrated ownership of our ordinary shares will prevent you and other investors in our shares from influencing significant decisions involving our company; and

we are incorporated in Singapore and our shareholders may have more difficulty in protecting their interests than they would as shareholders of a corporation incorporated in the United States.

Corporate Information

Our principal executive offices are located at 11 Lorong 3 Toa Payoh, Singapore 319579, and our telephone number at that address is +65 6681-9300. Our principal executive offices in the United States are located at 501 Pearl Drive (City of O Fallon), St. Peters, Missouri 63376, and our telephone number at that address is (636) 474-5000. Our website address upon the completion of this offering will be www.sunedisonsemi.com. The information on our website is not part of this prospectus.

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The Offering

	The Offering
Ordinary shares offered by us	shares.
Ordinary shares to be sold to the Samsung Purchasers in the Samsung Private Placements	
	shares.
Ordinary shares to be held by SunEdison immediately after this offering	
	shares.
Ordinary shares to be outstanding immediately after this offering and the Samsung Private Placements	
	shares.
Option to purchase additional shares	
	We have agreed to allow the underwriters to purchase up to an additional ordinary shares from us, at the public offering price, less the underwriting discount, within 30 days of the date of this prospectus.
Use of proceeds	We estimate that the net proceeds from this offering to us will be approximately \$\\$million, assuming an initial public offering price of \$\\$ per ordinary share, which is the midpoint of the price range listed on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We expect to use the net proceeds from this offering for the following purposes and in the following amounts:
	approximately \$ million will be used to provide a portion of

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the cash payment to SunEdison to repay in full the intercompany notes

issued in connection with the Formation Transactions;

approximately \$\) million will be used to repay existing third party indebtedness relating to the semiconductor materials business owed to a bank by our Japanese subsidiary; and

approximately \$ million will be retained as cash on our balance sheet.

The remaining portion of the cash payment to SunEdison to repay in full the intercompany notes issued in connection with the Formation Transactions will be funded from \$ million of borrowings under our new senior secured term loan and \$100 million of proceeds from the cash investment by Samsung Fine Chemicals in connection with the Samsung Private Placements.

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Dividend policy

We do not currently anticipate declaring or paying any cash dividends on our ordinary shares for the foreseeable future. Any future determination relating to our dividend policy will be made at the discretion of our board of directors and will depend on then existing conditions, including our financial condition, results of operations, contractual restrictions (including in the agreements governing our credit facilities), capital requirements, business prospects and other factors our board of directors may deem relevant. In addition, pursuant to Singapore law and our articles of association, no dividends may be paid except out of our profits. See Dividend Policy.

Proposed listing symbol

We intend to list our ordinary shares on the NASDAQ Global Select Market under the symbol SEMI.

Unless otherwise indicated, all information in this prospectus relating to the number of our ordinary shares to be outstanding immediately after this offering:

assumes no exercise by the underwriters of their option to purchase up to additional ordinary shares from us:

excludes an aggregate of ordinary shares reserved for issuance under the equity incentive plans we intend to adopt in connection with this offering;

assumes the issuance and sale of an aggregate of in the Samsung Private Placements; and

ordinary shares to the Samsung Purchasers

assumes an initial public offering price of \$ per ordin price range listed on the cover of this prospectus.

per ordinary share, which is the midpoint of the

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SUMMARY HISTORICAL AND PRO FORMA FINANCIAL DATA

The following table shows summary historical and pro forma financial data at the dates and for the periods indicated. The summary historical statement of operations data and balance sheet data as of December 31, 2013 and 2012 and for the years ended December 31, 2013, 2012 and 2011 have been derived from our audited combined financial statements included elsewhere in this prospectus. The historical financial statements as of December 31, 2013 and 2012 and for the years ended December 31, 2013, 2012 and 2011 are intended to represent the financial results of SunEdison s semiconductor materials business that will be contributed to us as part of the Transactions for those periods.

The summary unaudited pro forma financial data have been derived by the application of pro forma adjustments to our historical combined financial statements included elsewhere in this prospectus. The summary unaudited pro forma statements of operations for the year ended December 31, 2013 give effect to the Transactions (as described under Prospectus Summary Structure and Formation of Our Company), including the completion of this offering and the Samsung Private Placements and the application of the estimated net proceeds therefrom, as if they had occurred on January 1, 2013. The summary unaudited pro forma as adjusted balance sheet data as of December 31, 2013 give effect to the Transactions, including the completion of this offering and the Samsung Private Placements and the application of the estimated net proceeds therefrom as if they had occurred on December 31, 2013. See Unaudited Pro Forma Consolidated Financial Statements for additional information.

Our historical combined financial statements include expenses of SunEdison that were allocated to us for certain functions, including general corporate expenses related to communications, corporate administration, finance, legal, information technology, human resources, compliance, employee benefits and incentives, operations, research and development and stock compensation. These expenses were allocated in our historical results of operations on the basis of direct usage, where identifiable, with the remainder primarily allocated on the basis of revenue or other related sales metrics, headcount or number of our manufacturing plants. We consider the expense allocation methodology and results to be reasonable for all periods presented. However, these allocations may not necessarily be indicative of the actual expenses we would have incurred as an independent publicly traded company during the periods prior to this offering or of the costs we will incur in the future. No significant restructuring or impairment charges were included in these allocations from SunEdison.

The combined financial statements included in this prospectus may not be indicative of our future performance and do not necessarily reflect what our financial position and results of operations would have been had we operated as a stand-alone public company during the periods presented, including changes that will occur in our operations and capital structure as a result of the Transactions, including this offering. The summary unaudited pro forma financial data are presented for informational purposes only. The pro forma adjustments are based upon available information and certain assumptions that we believe are reasonable. The summary unaudited pro forma financial information does not purport to represent what our results of operations or financial position would have been if we operated as a public company during the periods presented and may not be indicative of our future performance.

The information presented in the following table under the columns identified as Pro Forma and the caption Other Financial Data is not directly derived from the financial statements.

The following tables should be read together with, and are qualified in their entirety by reference to, the historical combined financial statements and the accompanying notes appearing elsewhere in this prospectus. Among other things, the historical combined financial statements include more detailed information regarding the basis of presentation for the information in the following table. The tables should also be read together with Unaudited Pro Forma Consolidated Financial Statements, Management s Discussion and Analysis of Financial Condition and Results

of Operations and Certain Relationships and Related Party Transactions.

	Fiscal Year Ended December 31, Pro Forma						2011
		2013	2013 (unaudit	_	2012 nare data)		2011
Statement of Operations Data:			(111 111111011	s, except per si	iai e uata)		
Net sales to non-affiliates	\$	911.5	\$	\$	927.4	\$	1,051.3
Net sales to affiliates		9.1					