

SUPERCONDUCTOR TECHNOLOGIES INC

Form 424B5

February 21, 2012

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PROSPECTUS SUPPLEMENT
(To Prospectus Dated April 13, 2011)

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-172190

2,365,000 shares of Common Stock**Warrants to Purchase 1,773,750 shares of Common Stock****1,773,750 shares of Common Stock Underlying the Warrants**

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering 2,365,000 shares of our common stock, par value \$0.001 per share, and warrants to purchase up to 1,773,750 shares of our common stock. We are also offering an aggregate of up to 1,773,750 shares of our common stock upon exercise of the warrants. These securities will be sold in multiples of a fixed combination consisting of one share of common stock and a warrant to purchase up to 0.75 of a share of common stock. The warrants will have an initial exercise price of \$1.35 per share and will be exercisable for a period of five years but not prior to the six-month anniversary of their date of issuance. The shares of common stock and the warrants will be issued separately but can only be purchased together in this offering. Each fixed combination will be sold to investors at a price of \$1.05.

Our common stock is currently traded on the NASDAQ Capital Market under the symbol **SCON**. On February 17, 2012, the reported closing price per share of our common stock was \$1.01. The warrants will not be listed on any national securities exchange.

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks that we have described in this prospectus supplement under the caption Risk Factors starting on page S-6 of this prospectus supplement and under the caption Risk Factors in our most recently filed Annual Report on Form 10-K, as filed with the Securities and Exchange Commission, which is incorporated herein by reference in its entirety, and the other documents incorporated herein by reference.

We have retained Rodman & Renshaw, LLC to act as our exclusive placement agent in connection with the securities offered by this prospectus supplement. The placement agent has agreed to use its reasonable best efforts to sell the securities offered by this prospectus supplement. We have agreed to pay the placement agent the placement agent fees set forth in the table below, which assumes that we sell all of the fixed combinations of the shares and warrants we are offering.

| | Per Fixed Combination of One Share and a Warrant to Purchase 0.75 of a Share | Total |
|---|--|--------------|
| Public offering price | \$ 1.05 | \$ 2,483,250 |
| Placement Agent's fee ⁽¹⁾ | \$ 0.063 | \$ 148,995 |
| Proceeds to us (before expenses) ⁽²⁾ | \$ 0.987 | \$ 2,334,255 |

⁽¹⁾ 6.0% of the gross proceeds to be paid to the placement agent.

⁽²⁾ We have agreed to reimburse the placement agent for certain of its expenses as described under Plan of Distribution on page S-14 of this prospectus supplement.

We expect that delivery of the securities being offered under this prospectus supplement will be made to purchasers on or about February 22, 2012.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

RODMAN & RENSHAW, LLC

The date of this prospectus supplement is February 20, 2012

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ABOUT THIS PROSPECTUS SUPPLEMENT

You should rely only on information contained in this prospectus supplement, the accompanying prospectus and the documents we incorporate by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with information that is different. If anyone provides you with different or additional information, you should not rely on it. We are not offering to sell or seeking offers to buy our securities in any jurisdiction where the offer and sale is not permitted. You should assume that the information appearing in this prospectus supplement and the accompanying prospectus, including the documents incorporated herein and therein by reference, is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates. When we deliver this prospectus supplement or the accompanying prospectus or make a sale pursuant to this prospectus supplement, we are not implying that the information is current as of the date of the delivery or sale.

This prospectus supplement is a supplement to the accompanying prospectus that is also a part of this document. This prospectus supplement and the accompanying prospectus are part of a shelf registration statement that we filed with the Securities and Exchange Commission, or the SEC. Under the shelf registration process, we may offer from time to time shares of our common stock, preferred stock and warrants. In the accompanying prospectus, we provide you with a general description of the securities we may offer from time to time under our shelf registration statement. In this prospectus supplement, we provide you with specific information about the securities that we are selling in this offering. This prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein and therein include important information about us, our securities being offered and other information you should know before investing. This prospectus supplement also adds, updates and changes information contained in the accompanying prospectus. You should read both this prospectus supplement and the accompanying prospectus as well as the additional information described under [Where You Can Find More Information](#) before investing in our securities.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

Unless the context otherwise requires, the terms [we](#), [us](#), [our](#) and similar terms used in this prospectus supplement and the accompanying prospectus refer to Superconductor Technologies Inc. and its subsidiaries.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us and this offering. This information is not complete and does not contain all the information you should consider before investing in our securities. You should carefully read this entire prospectus supplement and the entire accompanying prospectus, including the Risk Factors section beginning on page S-6 of this prospectus supplement and the financial statements and the other information incorporated by reference in this prospectus supplement and the accompanying prospectus, before making an investment decision.

Our Company

We are a leading company in high temperature superconductor (HTS) materials and related technologies. HTS materials have the unique ability to conduct various signals or energy (e.g., electrical current or radio frequency (RF) signals) with little or no resistance when cooled to critical temperatures. Electric currents that flow through conventional conductors encounter resistance that requires power to overcome and generates heat. HTS materials can substantially improve the performance characteristics of electrical systems, reducing power loss, lowering heat generation and decreasing electrical noise. Circuits designed to remove interference inherent in some RF signals can also be made from HTS materials. Commercial use of HTS materials requires a number of cutting edge technologies, including development of HTS materials, specialized manufacturing expertise to create uniform thin layers of these materials, expert designs of circuits optimized for HTS materials, and technologies to maintain an extremely low temperature environment for HTS applications (although the critical temperatures for HTS are high compared with traditional superconductors, they are still extremely cold by other standards).

Strategic Initiatives

In addition to our ongoing design, manufacture, and sale of high performance infrastructure products for wireless voice and data applications described below, we have created several unique capabilities and an HTS manufacturing system that we are seeking to strategically deploy. Currently, our core strategic initiative is the development of a new wire platform.

Wire Platform. Following a review of our technical capabilities and core competencies, we determined that extending our HTS materials production into a new wire platform for power applications offers an attractive strategic business opportunity. Our second generation (2G) HTS wire product development is focused on large markets where the advantages of HTS wire are recognized by the industry. Our initial product roadmap targets three important applications:

Superconducting High Power Transmission Cables. HTS advanced power transmission cable transmits five to twenty times the electrical power of traditional copper or aluminum cables with much improved efficiency.

Superconducting Fault Current Limiters (SFCL). SFCLs act like powerful surge protectors, preventing harmful faults from taking down costly substation equipment. SFCLs enable the energy efficient connections of distributed power sources to the grid, fast reliable grid protection, and utilize smart grid design criteria.

Superconducting Wind Turbine Generators. Superconducting wind turbines allow utilities to add more power per tower by significantly reducing turbine size and weight and improving power generation efficiency.

While substantial technical challenges and business challenges remain before we have a commercially successful product introduction, we recently announced that we successfully produced 2G HTS wire samples that

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meet requirements specified by customers for HTS AC power cable, SFCLs and HTS wind turbine applications. We also announced high-magnetic-field test results for our 2G HTS wire. In an ongoing collaborative research and development agreement with Los Alamos National Laboratory (LANL), we and LANL produced a 2G HTS wire sample that demonstrates exceptional in-field critical current values. This current-carrying capability in high magnetic field demonstrates the effectiveness of our HTS fabrication process at producing 2G HTS wire for demanding applications such as superconducting fault current limiters and high-power wind turbine generators.

In addition to our core strategic initiative relating to a new wire platform, we also have on-going business activities relating to RF filters and cryocoolers.

RF Filters. Conventional RF filters are fabricated primarily from aluminum blocks with hollow cavities, resonators, and tuning elements incorporated to make a frequency specific filter. Our filter structures resemble a circuit on a semiconductor using a circuit that is etched into HTS materials that are deposited on a wafer. Our unique and innovative circuits allow us to utilize the characteristics of the HTS materials for this application. We have also developed unique tuning methods that allow us to produce a frequency specific filter.

Cryocoolers. HTS circuits need to be cooled to the critical temperature that enables the superconducting properties of the materials to be utilized. To meet this need, we developed a unique cryocooler that can efficiently and reliably cool the circuit to the critical temperature (77 degrees Kelvin). As a result, our wireless products are maintenance free and reliable enough to be deployed for many years.

Our HTS Manufacturing System

We consider our unique manufacturing systems to be significant to our business plan and competitive positioning, especially for our wire platform initiative. We have developed a proprietary Reactive Co-Evaporation and Cyclical Deposition Reaction (RCE-CDR), or simply RCE, deposition technique that allows us to precisely control growth rates, the relative proportions of metals and the chamber temperature. The process further allows us to precisely control and make the refinements necessary for a high-yield, high-output manufacturing. After extensive evaluation of a number of HTS compounds that include one or more of these HTS elements we chose yttrium barium copper oxide (YBCO) as the compound with the best properties for the applications we were pursuing. Utilizing this tightly controlled process and revolutionary RCE deposition method we increased production yield of our YBCO wafers to over 95%. In addition, because we can control the factors that determine the structure of the HTS crystal being grown, we are able to make innovative changes to the crystal to optimize its performance for various applications.

Our Proprietary Technology

Our development efforts over the last 24 years have yielded an extensive patent portfolio as well as critical trade secrets, unpatented technology and proprietary knowledge. We enter into confidentiality and non-disclosure agreements with our employees, suppliers and consultants to protect our proprietary information. Like almost all technology companies, we remain subject to a number of risks related to our ability to protect our proprietary technology.

We are currently focusing our development efforts on superconducting power applications. As discussed above, we are adapting our unique HTS materials deposition techniques to deliver energy efficient, cost-effective and high performance 2G HTS wire technology for next generation power applications. We have identified several large initial target markets for our 2G HTS wire including energy (wind turbines and smart grid devices) and industrial (electric motors and generators) applications. To accelerate development and manufacturing processes for our 2G HTS wire, we are partnering with HTS industry leaders such as the United States National

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Labs and the U.S. Department of Energy. In May 2010, we renewed our Cooperative Research and Development Agreement with Los Alamos National Laboratory for two years. These technological interchanges will help us meet the technical challenges and performance metrics for both high performance and cost effective 2G HTS wire.

Our development efforts (including those described above under Strategic Initiatives) can take a significant number of years to commercialize, and we must overcome significant technical barriers and deal with other significant risks. See Risk Factors.

Our Wireless Business

Our current revenue comes from the design, manufacture, and sale of high performance infrastructure products for wireless voice and data applications. We have three current product lines, all of which relate to wireless base stations:

SuperLink[®], a highly compact and reliable receiver front-end HTS wireless filter system to eliminate out-of-band interference for wireless base stations, combining filters with a proprietary cryogenic cooler and a cooled low-noise amplifier.

AmpLink[®], a ground-mounted unit for wireless base stations that includes a high-performance amplifier and up to six dual duplexers.

SuperPlex, a high-performance multiplexer that provides extremely low insertion loss and excellent cross-band isolation designed to eliminate the need for additional base station antennas and reduce infrastructure costs.

We sell most of our current commercial products to a small number of wireless carriers in the United States, including Alltel, AT&T Mobility, Sprint Nextel, T-Mobile and Verizon Wireless. We continue to experience challenges to revenue growth in the commercial wireless market. Demand for wireless communications equipment fluctuates dramatically and unpredictably. The wireless communications infrastructure equipment market is extremely competitive and is characterized by rapid technological change, new product development, product obsolescence, evolving industry standards and price erosion over the life of a product. We face constant pressures to reduce prices. Consequently, we expect the average selling prices of our products will continue decreasing over time. We expect these trends to continue and they may cause significant fluctuations in our quarterly and annual revenues. Our commercial operations are subject to a number of significant risks. See Risk Factors.

Recent Events

As previously announced by us on February 17, 2011, we entered into a Securities Purchase Agreement on February 16, 2012 with certain accredited investors, pursuant to which we agreed to issue to such accredited investors in a registered offering up to 4,346,219 shares of our common stock and warrants to purchase up to 3,259,664 shares of our common stock in multiples of a fixed combination consisting of one share of common stock and a warrant to purchase up to 0.75 of a share of common stock, at a price of \$1.05, for an aggregate offering price of \$4,563,529.95 (the Pending Offering). The closing of the Pending Offering, which is expected to occur on February 22, 2012, is subject to customary conditions, and is not a condition to the closing of the offering described in this Prospectus Supplement.

Corporate Information

Our executive offices are located at 9101 Wall Street Austin, Texas 78754 and at 460 Ward Drive, Santa Barbara, California 93111, and our telephone number is (805) 690-4500. We were incorporated in Delaware on May 11, 1987. Additional information about us is available on our website at www.supotech.com. The

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information contained on or that may be obtained from our website is not, and shall not be deemed to be, a part of or incorporated into this prospectus supplement or the accompanying prospectus. Our common stock is currently traded on the NASDAQ Capital Market under the symbol SCON.

The Offering

| | |
|--|--|
| Securities offered by us | 2,365,000 shares of common stock; Warrants to purchase up to 1,773,750 shares of common stock; and Up to 1,773,750 shares of common stock issuable upon exercise of the warrants. |
| Description of the warrants | Each purchaser will receive a warrant to purchase up to 0.75 of a share of common stock for each share of common stock it purchases in the offering. The warrants are exercisable for an initial exercise price of \$1.35 per share, subject to adjustment. The warrants are exercisable for a period of five years but not earlier than the six-month anniversary date of the issuance of the warrants. |
| Common stock to be outstanding immediately after this offering | 40,311,539 shares of common stock |
| Manner of offering | The sale of our securities will be made pursuant to a securities purchase agreement between us and each of the investors. See Plan of Distribution. |
| Use of proceeds | We intend to use the net proceeds from this offering for working capital and general corporate purposes. General corporate purposes may include capital expenditures. See Use of Proceeds. |
| Market for our common stock | Our common stock is quoted and traded on the NASDAQ Capital Market under the symbol SCON. |
| No Market for Warrants | There is no established public trading market for our warrants, and we do not intend to apply to list the warrants on any securities exchange or automated quotation system |
| The number of shares of common stock outstanding immediately after the closing of this offering is based on 33,600,320 shares of common stock outstanding as of February 17, 2012, and 4,346,219 shares of our common stock issuable upon closing of the Pending Offering, and, as of February 17, 2012, excluded: | |
| | 5,646,420 shares of our common stock issuable upon conversion of the 564,642 shares of outstanding Series A Convertible Preferred Stock; |
| | 1,527,757 shares of our common stock issuable upon exercise of stock options under our stock plans at a weighted average exercise price of \$3.97 per share; |
| | 627,123 shares of our common stock reserved for future issuance under our 2003 Equity Incentive Plan; |
| | 3,259,664 shares of our common stock issuable upon exercise of warrants to be issued to the purchasers in the Pending Offering at an exercise price of \$1.35 per share; and |

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1,773,750 shares of our common stock issuable upon exercise of warrants to be issued to the purchasers in this offering at an exercise price of \$1.35 per share.

Unless otherwise specifically stated, information throughout this prospectus supplement assumes that none of our outstanding options to purchase shares of our common stock are exercised.

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RISK FACTORS

Investment in our securities involves a high degree of risk. You should carefully consider the risks described below, as well as those risks described in the sections entitled Risk Factors and Management's Discussion and Analysis of Financial Condition and Results of Operations, each contained in our most recent Annual Report on Form 10-K for the year ended December 31, 2010, which has been filed with the SEC and is incorporated herein by reference in its entirety, as well as other information in this prospectus supplement and the accompanying prospectus or in any other documents incorporated herein or therein by reference. Each of the risks described in these sections and documents could adversely affect our business, financial condition, results of operations and prospects, and could result in a complete loss of your investment. This prospectus supplement and the accompanying prospectus and the incorporated documents also contain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks mentioned above.

Risks Related to this Offering

Our stock price is volatile.

The market price of our common stock has been, and we expect will continue to be, subject to significant volatility. The value of our common stock may decline regardless of our operating performance or prospects. Factors affecting our market price include:

our perceived prospects;

progress or any lack of progress (or perceptions related to progress) in timely overcoming the remaining substantial technical and commercial challenges related to our HTS wire initiative;

variations in our operating results and whether we have achieved key business targets;

changes in, or our failure to meet, earnings estimates;

changes in securities analysts' buy/sell recommendations;

differences between our reported results and those expected by investors and securities analysts;

announcements of new contracts by us or our competitors;

market reaction to any acquisitions, joint ventures or strategic investments announced by us or our competitors; and

general economic, political or stock market conditions.

Recent events have caused stock prices for many companies, including ours, to fluctuate in ways unrelated or disproportionate to their operating performance. The general economic, political and stock market conditions that may affect the market price of our common stock are beyond our control. The market price of our common stock at any particular time may not remain the market price in the future.

The number of shares available for future sale could adversely affect the market price of our common stock.

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We have entered into an at-the-market offering sales agreement with Citadel Securities LLC through which we may issue shares of our common stock with a maximum gross offering price of up to \$20,000,000. As described above, on February 16, 2011, pursuant to the Pending Offering, we agreed to issue up to an additional 4,346,219 shares our common stock and warrants to purchase up to 3,259,664 shares of our common stock. In addition, as of February 17, 2012, we had outstanding options exercisable for an aggregate of 931,363 shares of common stock at a weighted average exercise price of \$5.32 per share. As our stock price rises, the holders may exercise their options and sell a large number of shares. These additional issuances could cause the market price of our common stock to decline.

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As of February 17, 2012, Hunchun BaoLi Communication Co. Ltd., and its affiliates (collectively, BAOLI), hold a total of 2,852,194 shares of our common stock and 564,642 shares of our Series A Convertible Preferred Stock, or Series A Preferred Stock, which could be converted (under certain conditions) into an additional 5,646,420 shares of our common stock. All of these shares are restricted securities as defined under Rule 144 under the Securities Act. Under Rule 144, subject to compliance with certain conditions, BAOLI currently has the ability to sell, within 90 days, up to the greater of 1% of our outstanding stock or our average weekly trading volume over a four calendar week period. We cannot predict the likelihood or timing of any future sales by BAOLI or any of our other stockholders. Any sales by BAOLI or any other stockholders could depress the market price of our common stock.

We cannot predict whether future issuances of shares of our common stock or the availability of shares for resale in the open market will decrease the market price per share of our common stock. Sales of substantial amounts of shares of our common stock in the public market, or even the perception that such sales might occur, could adversely affect the market price of the shares of our common stock.

There is no public market for the warrants being offered in this offering.

There is no established public trading market for the warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the warrants on any securities exchange or automated quotation system. Without an active market, the liquidity of the warrants will be limited.

Holders of our warrants will have no rights as stockholders until such holders exercise their warrants.

Until you acquire shares upon exercise of your warrants, you will have no rights as stockholders with respect to the shares underlying such warrants. Upon exercise of your warrants, you will be entitled to exercise the rights of a stockholder only as to matters for which the record date occurs after the exercise date.

Our corporate governance structure may prevent our acquisition by another company at a premium over the public trading price of our shares.

Provisions of our restated certificate of incorporation, as amended, or our certificate of incorporation, and our amended and restated bylaws, as amended, or our bylaws, and of Delaware corporate law could delay or make more difficult an acquisition of our company by merger, tender offer or proxy contest, even if such an acquisition could create an immediate benefit to our stockholders. For example, our certificate of incorporation does not permit stockholders to act by written consent, and our bylaws generally require 90 days advance notice of any matters to be brought before the stockholders at an annual or special meeting.

In addition, our board of directors has the authority to issue up to 2,000,000 shares of preferred stock and to determine the terms, rights and preferences of this preferred stock, including voting rights of those shares, without any further vote or action by the stockholders. At February 17, 2012, 1,388,477 shares of preferred stock remained unissued. The rights of the holders of common stock may be subordinate to, and adversely affected by, the rights of holders of preferred stock that may be issued in the future. The issuance of preferred stock could also make it more difficult for a third party to acquire a majority of our outstanding voting stock, even at a premium over our public trading price.

Further, our certificate of incorporation also provides for a classified board of directors with directors divided into three classes serving staggered terms. These provisions may have the effect of delaying or preventing a change in control of us without action by our stockholders and, therefore, could adversely affect the price of our stock or the possibility of sale of shares to an acquiring person. See the section in the accompanying prospectus entitled "Description of Capital Stock - Anti-Takeover Effects of Certain Provisions of Delaware Law and Our Charter Documents."

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We do not anticipate declaring any cash dividends on our common stock.

We have never declared or paid cash dividends on our common stock and do not plan to pay any cash dividends in the near future. Our current policy is to retain all funds and earnings for use in the operation and expansion of our business.

Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.

We have not designated the amount of net proceeds from this offering to be used for any particular purpose. Accordingly, our management will have broad discretion as to the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase our profitability or market value.

You will experience immediate dilution in the book value per share of common stock as a result of this offering.

Investors in this offering will experience immediate dilution in their net tangible book value per share to the extent of the difference between the public offering price per fixed combination of securities and the adjusted net tangible book value per share after giving effect to the offering. See the section entitled "Dilution" below.

Risks Related to Our Business

Our strategic initiative to develop a new wire platform may not prove to be successful.

We have spent a considerable amount of resources in developing a new wire platform for power applications. Substantial technical and business challenges remain before we have a commercially successful product introduction. We may not be able to overcome these challenges in a timely or cost effective manner, if at all. Such a failure could adversely impact our prospects, liquidity and stock price.

Additional Risks Related to our Business, Industry and an Investment in our Common Stock

For a discussion of additional risks associated with our business, our industry and an investment in our common stock, see the section entitled "Risk Factors" in our most recent Annual Report on Form 10-K, as filed with the SEC on March 21, 2011, as well as the disclosures contained in documents filed by us thereafter pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or Exchange Act, which are incorporated by reference into, and deemed to be a part of, this prospectus supplement and the accompanying prospectus.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement contains, and may incorporate by reference, forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or Securities Act, and Section 21E of the Exchange Act. These forward-looking statements relate to future events or our future performance and include, but are not limited to, statements concerning our business strategy, future commercial revenues, market growth, capital requirements, new product introductions, expansion plans and the adequacy of our funding. Other statements contained in this prospectus supplement or the accompanying prospectus that are not historical facts are also forward-looking statements. We have tried, wherever possible, to identify forward-looking statements by terminology such as may, will, could, should, expect, anticipate, intend, believe, seek, estimate and other comparable terminology. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or projections.

Factors that could cause actual results to differ from those discussed in the forward-looking statements include, but are not limited to:

limited cash and a history of losses;

our ability to raise sufficient capital to fund our operations, and the impact on our strategic initiatives of any inability to raise such funds;

the impact of any such financing activity on the level of our stock price;

limited number of potential customers;

rapidly advancing technology in our target markets;

our need to overcome additional technical challenges in attaining milestones to develop and manufacture commercial lengths of our HTS wire;

customer acceptance of our HTS wire;

the impact of competitive products, technologies and pricing;

limited number of suppliers for some of our components;

no significant backlog from quarter to quarter;

fluctuations in sales and product demand from quarter to quarter, which can be significant;

our proprietary rights, while important to our business, are difficult and costly to protect;

manufacturing capacity constraints and difficulties;

cost and uncertainty from compliance with environmental regulations; and

local, regional, and national and international economic conditions and events, and the impact they may have on us and our customers, such as the current worldwide recession.

We claim the protection of the safe harbor contained in the Private Securities Litigation Reform Act of 1995. We caution investors that any forward-looking statements presented in this prospectus supplement or the accompanying prospectus or the documents incorporated by reference herein or therein, or those that we may make orally or in writing from time to time, are based upon management's beliefs and assumptions and are made based on information available to us as of the time made and the actual outcome will be affected by known and unknown risks, trends, uncertainties and factors that are beyond our control or ability to predict. Although we believe that our assumptions are reasonable, they are not guarantees of future performance and some will inevitably prove to be incorrect. As a result, our actual future results can be expected to differ from our expectations, and those differences may be material. Accordingly, investors should use caution in relying on past forward-looking statements, which are based on known results and trends at the time they are made, to anticipate future results or trends.

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We undertake no obligation to publicly update or revise any forward-looking statements included or incorporated by reference in this prospectus supplement or the accompanying prospectus or to update the reasons why actual results could differ from those contained in such statements, whether as a result of new information, future events or otherwise, except to the extent required by federal securities laws. Forward-looking statements may be contained in this prospectus supplement or the accompanying prospectus (and the documents incorporated by reference herein and therein) under Risk Factors, or may be contained in our Annual Report on Form 10-K or in our Quarterly Reports on Form 10-Q under headings such as Risk Factors, Management's Discussion and Analysis of Financial Condition and Results of Operations and Business, or in our Current Reports on Form 8-K, among other places. Any investor in us should consider all risks and uncertainties disclosed in our filings with the SEC described below under the heading Where You Can Find More Information, all of which are accessible on the SEC's website at www.sec.gov.

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We estimate that the net proceeds to us from this offering will be approximately \$2,284,255, after deducting fees due the placement agent and our estimated offering expenses, as described in the section captioned Plan of Distribution on page S-14. We currently intend to use the net proceeds from the sale of our securities under this prospectus supplement for working capital and general corporate purposes. General corporate purposes may include capital expenditures. In addition, we may use a portion of any net proceeds to acquire complementary products, technologies or businesses. We will have significant discretion in the use of any net proceeds. Investors will be relying on the judgment of our management regarding the application of the proceeds of any sale of the securities. We may invest the net proceeds temporarily until we use them for their stated purpose.

DILUTION

If you invest in the securities being offered in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per fixed combination of securities and the adjusted net tangible book value per share after giving effect to the offering. Our net tangible book value per share represents our total tangible assets less total liabilities divided by the number of shares of our common stock outstanding. We determine dilution by subtracting the adjusted net tangible book value per share after this offering from the public offering price per fixed combination of securities being offered. Our net tangible book value as of October 1, 2011 was approximately \$12.6 million, or \$0.38 per share of our common stock based on 33,494,457 shares outstanding. This section shows dilution giving effect to the closing of the Pending Offering together with this offering and also shows dilution on a stand-alone basis for this offering.

Dilution giving effect to the Pending Offering and this offering

After giving effect to the issuance and sale of all (1) 4,346,219 shares of our common stock and the warrants to purchase up to an additional 3,259,664 shares of common stock at the public offering price per fixed combination of \$1.05 in the Pending Offering, and after deducting the commissions and estimated offering expenses payable by us in connection with the Pending Offering, but excluding any effects of the exercises of the warrants issued in the Pending Offering and (2) 2,365,000 of the offered shares of our common stock and the warrants to purchase up to an additional 1,773,750 shares of common stock at the public offering price per fixed combination of \$1.05 in this offering, and after deducting the commissions and estimated offering expenses payable by us in connection with this offering, but excluding any effects of the exercises of the warrants issued in this offering, our tangible net book value as of October 1, 2011 would have been approximately \$19.1 million, or \$0.47 per share of our common stock. This amount represents an immediate increase in net tangible book value of \$0.09 per share to investors in this offering. The following table illustrates the dilution in net tangible book value per share to new investors giving effect to the Pending Offering and this offering:

| | |
|---|---------|
| Public offering price per fixed combination of securities (consisting of one share and a warrant to purchase up to 0.75 of a share) | \$ 1.05 |
| Net tangible book value per share as of October 1, 2011 | \$ 0.38 |
| Increase per share attributable to the Pending Offering and this offering | \$ 0.09 |
| Adjusted net tangible book value per share after giving effect to the Pending Offering and this offering | \$ 0.47 |
| Dilution in net tangible book value per share to new investors | \$ 0.58 |

Dilution giving effect to this offering only

After giving effect to the issuance and sale of all 2,365,000 of the offered shares of our common stock and the warrants to purchase up to an additional 1,773,750 shares of common stock at the public offering price per fixed combination of \$1.05 in this offering, and after deducting the commissions and estimated offering expenses payable by us in connection with this offering, but excluding any effects of the exercises of the warrants issued in this offering (and excluding any effects of the sale and issuance of shares of common stock and warrants under

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the Pending Offering), our tangible net book value as of October 1, 2011 would have been approximately \$14.8 million, or \$0.41 per share of our common stock. This amount represents an immediate increase in net tangible book value of \$0.03 per share to investors in this offering. The following table illustrates the dilution in net tangible book value per share to new investors giving effect to the this offering only:

| | |
|---|---------|
| Public offering price per fixed combination of securities (consisting of one share and a warrant to purchase up to 0.75 of a share) | \$ 1.05 |
| Net tangible book value per share as of October 1, 2011 | \$ 0.38 |
| Increase per share attributable to this offering | \$ 0.03 |
| Adjusted net tangible book value per share after giving effect to this offering | \$ 0.41 |
| Dilution in net tangible book value per share to new investors | \$ 0.64 |

The information above excludes the following shares, as of October 1, 2011:

1,608,265 shares of our common stock issuable upon exercise of stock options under our stock plans at a weighted average exercise price of \$4.59 per share;

757,996 shares of our common stock reserved for future issuance under our 2003 Equity Incentive Plan; and

3,259,664 shares of our common stock issuable upon exercise of warrants to be issued to the purchasers in this offering, at an exercise price of \$1.35 per share.

To the extent that options outstanding as of October 1, 2011 have been or may be exercised or other shares are issued, there may be a further dilution to new investors.

The information above also excludes 5,646,420 shares of our common stock issuable upon conversion of the 564,642 shares of outstanding Series A Preferred Stock. The conversion of our Series A Preferred Stock is subject to certain limitations. See Description of Capital Stock Preferred Stock Series A Convertible Preferred Stock on page 7 of the accompanying prospectus.

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DESCRIPTION OF SECURITIES

Common Stock

A description of the common stock we are offering pursuant to this prospectus supplement is set forth under the heading "Description of Capital Stock" starting on page 7 of the accompanying prospectus. As of February 17, 2012, we had 33,600,320 shares of common stock outstanding.

Warrants

The warrants offered in this offering will be issued pursuant to a securities purchase agreement between each of the purchasers and us. You should review the forms of securities purchase agreement and warrant, which will be filed as exhibits to a Current Report on Form 8-K filed with the SEC in connection with this offering, for a complete description of the terms and conditions applicable to the warrants. The following is a brief summary of the warrants and is subject in all respects to the provisions contained in such warrants. There is no warrant agent for this offering.

Exercisability; Beneficial Ownership Limitation. The warrants will be exercisable for a period of five years but not prior to the six-month anniversary of the closing date of the offering. The warrants may be exercised, at the option of the holder, in whole or in part, by delivering to us a duly executed exercise notice. Within three trading days following the date of exercise, the holder will deliver the aggregate exercise price for all shares specified in the exercise notice (except in the case of a cashless exercise in the circumstances discussed below). The holder of a warrant does not have the right to exercise any portion of the warrant if the holder would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after the exercise. This percentage, however, may be raised or lowered to an amount not in excess of 9.99% at the option of the holder upon at least 61 days' prior written notice from the holder to us.

Cashless Exercise. If, at the time of exercise, there is no effective registration statement registering, or no current prospectus available for, the issuance to the holder of the shares of common stock underlying the warrant, the holder may exercise, in whole or in part, the warrant on a cashless basis. When exercised on a cashless basis, a portion of the warrant is cancelled in payment of the purchase price payable in respect of the number of shares of our common stock purchasable upon such exercise.

Exercise Price. The warrants will provide for an exercise price of \$1.35 per share. The exercise price of the warrants, and in some cases the number of shares issuable upon exercise of the warrants, will be subject to appropriate adjustment in relation to certain events, such as stock dividends or other distributions on shares of common stock or any other equity or equity equivalent securities payable in shares of common stock, stock splits, stock combinations, reclassifications or similar events affecting our common stock, and also, subject to limitations, upon any distribution of assets, including cash, stock or other property to our stockholders.

Transferability. Subject to applicable law, the warrants may be transferred at the option of the holder upon surrender of the warrants with the appropriate instruments of transfer.

Purchase Rights, Fundamental Transactions and Change of Control. If we sell or grant any common stock equivalents or rights to purchase stock, warrants or securities or other property to our stockholders on a pro rata basis, we will provide the holders of the warrant with the right to acquire, upon the same terms, the securities subject to such purchase rights as though the warrants had been exercised immediately prior to the declaration of

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such rights; provided that to the extent that the holder's right to participate in such purchase rights would result in the holder exceeding the beneficial ownership limitation described above, then the holder will not be entitled to participate in the purchase right to such extent and such purchase right, to such extent, will be held in abeyance for the holder until its right to such purchase right would not result in the holder exceeding the beneficial ownership limitations. In addition, the aggregate number of shares of common stock issuable in respect of the purchase rights, when aggregated with the shares issued under the securities purchase agreement(s) and the shares issuable upon exercise of the warrants, will not exceed 19.99% of the number of issued and outstanding shares of common stock on the closing date (subject to adjustment for stock splits, stock dividends or other similar recapitalizations).

If we consummate a merger or consolidation with or into another person or other reorganization event in which our common stock is converted or exchanged for securities, cash or property, or we sell, lease, license or otherwise dispose of all or substantially all of our assets, or we or another person acquire 50% or more of our outstanding common stock, each a Fundamental Transaction, then following such event, the holders of the warrants would be entitled to receive, upon exercise of the warrants, the same kind and amount of securities, cash or property that the holders would have received had they exercised the warrants immediately prior to such Fundamental Transaction. Any successor to us or surviving entity must assume the obligations under the warrants.

Exchange Listing. We do not intend to list the warrants on any securities exchange or automated quotation system. Our common stock is listed on The Nasdaq Capital Market.

Rights as Stockholder. The holders of the warrants will not have any rights or privileges as stockholders with respect to the shares underlying the warrants until they exercise their warrants.

Fractional Shares. No fractional share of common stock will be issued in connection with the exercise of a warrant. In lieu of fractional share, we, at our election, will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

Waivers and Amendments. The provisions of each warrant may be amended or modified, or the provisions thereof waived, only with the written consent of us and the warrant holder.

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PLAN OF DISTRIBUTION

Pursuant to an engagement letter, dated as of February 13, 2012, as amended on February 20, 2012, between us and Rodman & Renshaw, LLC, we have engaged Rodman & Renshaw, LLC as our exclusive placement agent to solicit offers to purchase the securities offered by this prospectus supplement. Rodman & Renshaw, LLC is not purchasing any securities for its own account in this offering, and is not required to arrange the purchase or sale of any additional specific number or dollar amount of the securities.

Rodman & Renshaw, LLC has agreed to use its reasonable best efforts to arrange for the sale of all of the securities in this offering. There is no requirement that any minimum number of securities or dollar amount of securities be sold in this offering and there can be no assurance that we will sell all or any of the securities being offered. We will enter into a securities purchase agreement, or purchase agreement, directly with the investors who purchase securities in this offering, and we will only sell to investors who have entered into the purchase agreement. Our obligation to issue and sell securities to the investors is subject to the conditions set forth in the purchase agreement, which may be waived by us in our discretion. An investor's obligation to purchase our securities is subject to conditions set forth in the purchase agreement as well, which also may be waived. The engagement letter provides that the obligations of Rodman & Renshaw, LLC are subject to certain conditions precedent, including, among other things, the receipt of certain opinions, letters and certificates from us or our counsel.

We currently anticipate that the closing of this offering will take place no later than February 22, 2012. On the closing date, the following will occur:

we will receive funds in the amount of the aggregate purchase price;

Rodman & Renshaw, LLC, as placement agent will receive the placement agent fees in accordance with the terms of the engagement letter; and

we will deliver the securities to the investors.

We have agreed to pay Rodman & Renshaw, LLC an aggregate fee equal to 6.0% of the gross proceeds from the sale of the securities in this offering. We have also agreed to reimburse Rodman & Renshaw, LLC for expenses incurred by it in connection with this offering. Such reimbursement will be non-accountable and limited to the lesser of 1.0% of the aggregate gross offering proceeds and \$75,000 in the aggregate with the Pending Offering.

The following table shows the per share and total placement agent fees we will pay in connection with the sale of the shares, assuming the purchase of all of the shares we are offering.

| | |
|--|-----------|
| Placement agent fees per fixed combination of securities | \$ 0.063 |
| Maximum offering total | \$148,995 |

Under no circumstances will the fee, commission or discount received by the placement agent or any other member of the Financial Institutions Regulatory Authority (FINRA) or independent broker-dealer exceed eight percent (8%) of the gross proceeds to us in this offering or any other offering in the United States pursuant to this prospectus supplement and the accompanying prospectus.

We estimate the total expenses of this offering which will be payable by us, excluding the placement agent fees, will be approximately \$50,000. After deducting the fees due to the placement agent and our estimated offering expenses, we expect the net proceeds from this offering to be approximately \$2,284,255.

We have agreed to indemnify the placement agent and purchasers against liabilities under the Securities Act and to contribute to payments that the placement agent may be required to make in respect of such liabilities.

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The placement agent has informed us that it will not engage in over-allotment, stabilizing transactions or syndicate covering transactions in connection with this offering.

This is a brief summary of the material provisions of the engagement letter with Rodman and Renshaw, LLC and the purchase agreement to be entered into with investors and does not purport to be a complete statement of their terms and conditions. These documents have been or will be included as an exhibit to our Current Report on Form 8-K filed with the SEC in connection with this offering and incorporated by reference into the registration statement of which this prospectus supplement forms a part. See [Where You Can Find More Information](#).

Other than the electronic formats of this prospectus supplement and the accompanying prospectus made available by the placement agent, the information contained on, or accessible through, either the placement agent's website or any other website maintained by it is not part of the prospectus supplement, the accompanying prospectus or the registration statement of which this prospectus supplement and the accompanying prospectus form a part, has not been approved or endorsed by us and should not be relied upon by investors.

The transfer agent for our common stock is Registrar and Transfer Company, Cranford, New Jersey.

Our common stock is listed on the NASDAQ Capital Market under the symbol [SCON](#).

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LEGAL MATTERS

Certain legal matters relating to the validity of our securities offered by this prospectus supplement will be passed upon for us by Manatt, Phelps & Phillips, LLP, Los Angeles, California. Ellenoff Grossman & Schole, LLP, New York, New York, is counsel for Rodman & Renshaw, LLC in connection with this offering.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3, as amended, to register the securities offered by this prospectus supplement. However, this prospectus supplement does not contain all of the information contained in the registration statement and the exhibits and schedules to the registration statement. We encourage you to carefully read the registration statement and the exhibits and schedules to the registration statement. Statements in this prospectus supplement and the accompanying prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements.

We file annual, quarterly, and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public on the SEC's website at www.sec.gov and on the investor relations page of our website at www.suptech.com. Except for those SEC filings incorporated by reference in this prospectus supplement, none of the other information on our website is part of this prospectus supplement. You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street N.E., Washington, D.C. 20549. You can also obtain copies of the documents upon the payment of a duplicating fee to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

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PROSPECTUS

\$80,000,000

Common Stock

Preferred Stock

Warrants

We may offer, from time to time, separately or together in any combination, common stock, preferred stock or warrants having an aggregate offering price of up to \$80,000,000.

We may offer the securities in one or more series, in amounts, at prices and on terms determined at the time of offering. We will provide the specific terms of any securities we actually offer for sale in supplements to this prospectus.

We may sell these securities directly, through agents, dealers or underwriters as designated from time to time, or through a combination of these methods. We reserve the sole right to accept, and together with our agents, from time to time, to reject in whole or in part any proposed purchase of securities to be made directly or through agents. If our agents or any dealers or underwriters are involved in the sale of securities, the applicable prospectus supplement will set forth the names of the agents, dealers or underwriters and any applicable commissions or discounts.

You should read carefully this prospectus, each prospectus supplement and the documents incorporated by reference into this prospectus and any prospectus supplement before you invest in any of our securities. This prospectus may not be used to sell securities unless accompanied by a prospectus supplement.

Our common stock is traded on the NASDAQ Capital Market under the symbol **SCON**. On April 8, 2011, the closing sale price of our common stock on the NASDAQ Capital Market was \$3.27 per share.

Investing in our Securities involves risks. You should carefully consider the risk factors included under the heading Risk Factors in the applicable prospectus supplement and under that heading or similar headings in the other documents incorporated by reference in this prospectus or any prospectus supplement before making a decision to purchase our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities described in this prospectus or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is April 13, 2011.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement we filed with the Securities and Exchange Commission, or the SEC, using a shelf registration process. Under the shelf registration process, using this prospectus, together with a prospectus supplement, we may sell, from time to time, in one or more offerings, any combination of the securities described in this prospectus in a dollar amount that does not exceed \$80,000,000 in the aggregate. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities, a prospectus supplement will be provided that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. To the extent that any statement we make in a prospectus supplement is inconsistent with statements made in this prospectus, the statements made in this prospectus will be deemed modified or superseded by those made in the prospectus supplement.

You should read this prospectus, the applicable prospectus supplement and the information incorporated by reference in this prospectus or any prospectus supplement before making an investment in our securities. See Documents Incorporated by Reference and Where You Can Find More Information for more information. You should rely only on the information contained in or incorporated by reference in this prospectus or a prospectus supplement. We have not authorized anyone to provide you with different information. This document may be used only in jurisdictions where offers and sales of these securities are permitted. You should not assume that information contained in this prospectus, in any supplement to this prospectus, or in any document incorporated by reference is accurate as of any date other than the date on the front page of the document that contains the information, regardless of when this prospectus or a prospectus supplement is delivered or when any sale of our securities occurs.

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SUMMARY

Our Company

We are a leading company in developing and commercializing high temperature superconductor (HTS) materials and related technologies. Superconductivity is the unique ability to conduct various signals or energy (e.g., electrical current or radio frequency (RF) signals) with little or no resistance when cooled to critical temperatures. HTS materials are a family of elements that demonstrate superconducting properties at temperatures significantly warmer than previous superconducting materials. Electric currents that flow through conventional conductors encounter resistance that requires power to overcome and generates heat. HTS materials can substantially improve the performance characteristics of electrical systems, reducing power loss, lowering heat generation and decreasing electrical noise. Circuits designed to remove interference inherent in some RF signals can also be made from HTS materials. Commercial use of HTS materials requires a number of cutting edge technologies, including development of HTS materials, specialized manufacturing expertise to create uniform thin layers of these materials, expert designs of circuits optimized for HTS materials, and technologies to maintain an extremely low temperature environment for HTS applications (although the critical temperatures for HTS are high compared with traditional superconductors, they are still extremely cold by other standards).

Strategic Initiatives

In addition to our ongoing design, manufacture, and sale of high performance infrastructure products for wireless voice and data applications described below, we have created several unique capabilities and an HTS manufacturing system that we are seeking to strategically deploy. The capabilities relate to a new wire platform, RF filters and cryocoolers:

Wire Platform. Following a review of our technical capabilities and core competencies, we determined that extending our HTS materials production into a new wire platform for power applications offers an attractive strategic business opportunity. Our second generation (2G) HTS wire product development is focused on large markets where the advantages of HTS wire are recognized by the industry. Our initial product roadmap targets three important applications:

Superconducting High Power Transmission Cables: HTS advanced power transmission cable transmits five to twenty times the electrical power of traditional copper or aluminum cables with much improved efficiency.

Superconducting Fault Current Limiters (SFCL): SFCLs act like powerful surge protectors, preventing harmful faults from taking down costly substation equipment. SFCLs enable the energy efficient connections of distributed power sources to the grid, fast reliable grid protection, and utilize smart grid design criteria.

Superconducting Wind Turbine Generators: Superconducting wind turbines allow utilities to add more power per tower by significantly reducing turbine size and weight and improving power generation efficiency.

While substantial technical challenges and business challenges remain before we have a commercially successful product introduction, we recently announced that we successfully produced 2G HTS wire samples that meet requirements specified by customers for HTS AC power cable, SFCLs and HTS wind turbine applications. We also announced high-magnetic-field test results for our 2G HTS wire. In an ongoing collaborative research and development agreement with Los Alamos National Laboratory (LANL), we and LANL produced a 2G HTS wire sample that demonstrates exceptional in-field critical current values. This current-carrying capability in high magnetic field demonstrates the effectiveness of our HTS fabrication process at producing 2G HTS wire for demanding applications such as superconducting fault current limiters and high-power wind turbine generators.

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RF Filters. Conventional RF filters are fabricated primarily from aluminum blocks with hollow cavities, resonators, and tuning elements incorporated to make a frequency specific filter. Our filter structures resemble a circuit on a semiconductor using a circuit that is etched into HTS materials that are deposited on a wafer. Our unique and innovative circuits allow us to utilize the characteristics of the HTS materials for this application. We have also developed unique tuning methods that allow us to produce a frequency specific filter.

Cryocoolers. HTS circuits need to be cooled to the critical temperature that enables the superconducting properties of the materials to be utilized. To meet this need, we developed a unique cryocooler that can efficiently and reliably cool the circuit to the critical temperature (77 degrees Kelvin). As a result, our wireless products are maintenance free and reliable enough to be deployed for many years.

Our HTS Manufacturing System

We consider our manufacturing systems to be significant to our business plan and competitive positioning, including on our wire platform initiative. We have developed a proprietary Reactive Co-Evaporation and Cyclical Deposition Reaction (RCE), deposition technique that allows us to precisely control growth rates, the relative proportions of metals and the chamber temperature. The process further allows us to precisely control and make the refinements necessary for a high-yield, high-output manufacturing. After extensive evaluation of a number of HTS compounds that include one or more of these HTS elements we chose yttrium barium copper oxide (YBCO) as the compound with the best properties for the applications we were pursuing. Utilizing this tightly controlled process and revolutionary RCE deposition method we increased production yield of our YBCO wafers to over 95%. In addition, because we can control the factors that determine the structure of the HTS crystal being grown, we are able to make innovative changes to the crystal to optimize its performance for the RF filtering application.

Our Proprietary Technology

We are focused on research and development to maintain our technological edge. As of December 31, 2010, we had 23 employees in our research and development division; 7 of our employees have Ph.D. s, and 7 others hold advanced degrees in physics, materials science, electrical engineering and other fields. Our development efforts over the last 23 years have yielded an extensive patent portfolio as well as critical trade secrets, unpatented technology and proprietary knowledge. We enter into confidentiality and non-disclosure agreements with our employees, suppliers and consultants to protect our proprietary information. As of December 31, 2010, we held 61 U.S. patents in addition to 23 issued foreign patents, 17 U.S. patent applications pending and 64 foreign applications patents pending.

We are currently focusing our efforts on applications in areas such as:

Wireless Networks. Our current commercial products help maximize the performance of wireless telecommunications networks by improving the quality of uplink signals from mobile wireless devices. Our products increase capacity utilization, lower dropped and blocked calls, extend coverage, and enable higher wireless data throughput all while reducing capital and operating costs. We are leveraging our unique filtering technology to pursue wireless business on multiple fronts: capturing wireless business with tier one U.S. wireless carriers for the LTE network build out, and developing our advanced reconfigurable filtering technology, which has the potential to drastically reduce the size and cost of mobile devices.

Superconducting Power Applications. As discussed above, we are adapting our unique HTS materials deposition techniques to deliver energy efficient, cost-effective and high performance 2G HTS wire technology for next generation power applications. We have identified several large initial target markets for our 2G HTS wire including energy (wind turbines, smart grid) and industrial (motors, generators) applications. To accelerate development and manufacturing processes for our 2G HTS wire, we are

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partnering with HTS industry leaders such as the United States National Labs and the U.S. Department of Energy. In August 2009, we renewed our two year Cooperative Research and Development Agreement with LANL. These technological interchanges will help us meet the technical challenges and performance metrics for both high performance and cost effective 2G HTS wire. Our development efforts (including those described above under Strategic Initiatives) can take a significant number of years to commercialize, and we must overcome significant technical barriers and deal with other significant risks. See Risk Factors.

Our Wireless Business

Our current revenue comes from the design, manufacture, and sale of high performance infrastructure products for wireless voice and data applications. We have three current product lines, all of which relate to wireless base stations:

SuperLink[®], a highly compact and reliable receiver front-end HTS wireless filter system to eliminate out-of-band interference for wireless base stations, combining filters with a proprietary cryogenic cooler and a cooled low-noise amplifier.

AmpLink[®], a ground-mounted unit for wireless base stations that includes a high-performance amplifier and up to six dual duplexers.

SuperPlex, a high-performance multiplexer that provides extremely low insertion loss and excellent cross-band isolation designed to eliminate the need for additional base station antennas and reduce infrastructure costs.

We sell most of our current commercial products to a small number of wireless carriers in the United States, including Alltel, AT&T, Sprint Nextel, T-Mobile and Verizon Wireless. We are seeking to expand our customer base by selling directly to other wireless network operators and manufacturers of base station equipment, including internationally. Demand for wireless communications equipment fluctuates dramatically and unpredictably. The wireless communications infrastructure equipment market is extremely competitive and is characterized by rapid technological change, new product development, product obsolescence, evolving industry standards and price erosion over the life of a product. We face constant pressures to reduce prices. Consequently, we expect the average selling prices of our products will continue decreasing over time. We expect these trends to continue and may cause significant fluctuations in our quarterly and annual revenues. Our commercial operations are subject to a number of significant risks. See Risk Factors.

Corporate Information

Our facilities and executive offices are located at 460 Ward Drive, Santa Barbara, California 93111, and our telephone number is (805) 690-4500. We were incorporated in Delaware on May 11, 1987. Additional information about us is available on our website at www.suptech.com. The information contained on or that may be obtained from our website is not, and shall not be deemed to be, a part of this prospectus. Our common stock is currently traded on the NASDAQ Capital Market under the symbol SCON.

The Securities We May Offer

With this prospectus, we may offer common stock, preferred stock and warrants, separately or together in any combination of the foregoing. The aggregate initial offering price of all securities we sell in the primary offerings under this prospectus will not exceed \$80,000,000. Each time we offer securities with this prospectus, we will provide offerees with a prospectus supplement that will contain the specific terms of the securities being offered. The following is a summary of the securities we may offer with this prospectus.

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We may sell the securities to or through underwriters, dealers or agents or directly to purchasers. We, as well as any agents acting on our behalf, reserve the sole right to accept and to reject in whole or in part any proposed purchase of securities. Each prospectus supplement will set forth the names of any underwriters, dealers or agents involved in the sale of securities described in that prospectus supplement and any applicable fee, commission or discount arrangements with them.

Common Stock

We may offer shares of our common stock, par value \$0.001 per share, either alone or underlying other registered securities convertible into or exchangeable for our common stock. Holders of our common stock are entitled to such dividends as our board of directors may declare from time to time out of legally available funds, subject to the preferential rights of the holders of any shares of our preferred stock that are outstanding or that we may issue in the future. Currently, we do not pay any dividends. Each holder of our common stock is entitled to one vote per share. Holders of our common stock have no preemptive rights. In this prospectus, we provide a general description of, among other things, our dividend policy and the transfer and voting restrictions that apply to holders of our common stock.

Preferred Stock

We may issue shares of preferred stock in one or more classes or series. Our board of directors or a committee designated by our board of directors will determine the dividend, voting and conversion rights and other provisions at the time of sale. The particular terms of each class or series of preferred stock, including redemption privileges, liquidation preferences, voting rights, dividend rights and/or conversion rights, will be more fully described in the applicable prospectus supplement relating to the preferred stock offered thereby.

Warrants

We may offer warrants for the purchase of shares of preferred or common stock. We may issue the warrants by themselves or together with preferred stock or common stock and the warrants may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a warrant agent. Our board of directors or a committee designated by our board of directors will determine the terms of the warrants at the time of sale. This prospectus contains only general terms and provisions of the warrants. The applicable prospectus supplement will describe the particular terms of the warrants being offered thereby.

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RISK FACTORS

We have included discussions of cautionary factors describing risks relating to our business and an investment in our securities in our Annual Report on Form 10-K for the year ended December 31, 2010, which is incorporated by reference into this prospectus. See [Where You Can Find More Information](#) for an explanation of how to get a copy of this report. Additional risks related to our securities may also be described in a prospectus supplement. Before purchasing our securities, you should carefully consider the risk factors we describe in any prospectus supplement or in any report incorporated by reference into this prospectus or such prospectus supplement, including our Annual Report on Form 10-K for the year ended December 31, 2010 or any Annual Report on Form 10-K or Quarterly Report on Form 10-Q that is incorporated by reference into this prospectus or such prospectus supplement after the date of this prospectus. Although we discuss key risks in those risk factor descriptions, additional risks not currently known to us or that we currently deem immaterial also may impair our business. Our subsequent filings with the SEC may contain amended and updated discussions of significant risks. We cannot predict future risks or estimate the extent to which they may affect our financial performance.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains, and may incorporate by reference, forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or Exchange Act. You can find many (but not all) of these statements by looking for words such as approximates, believes, hopes, expects, anticipates, estimates, intends, plans, would, should, could, may, will or other similar expressions in this prospectus or the documents incorporated by reference. Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or projections. Factors that could cause actual results to differ from those discussed in the forward-looking statements include, but are not limited to:

limited cash and a history of losses;

the current worldwide recession;

our need to raise additional capital for our business;

limited number of potential customers;

rapidly advancing technology in our target markets;

our need to overcome additional technical challenges necessary to develop and commercialize HTS wire;

the impact of competitive products, technologies and pricing;

limited number of suppliers for some of our components;

no significant backlog from quarter to quarter;

fluctuations in sales, product demand from quarter to quarter can be significant;

our proprietary rights, while important to our business, are difficult and costly to protect;

manufacturing capacity constraints and difficulties; and

cost and uncertainty from compliance with environmental regulations.

We claim the protection of the safe harbor contained in the Private Securities Litigation Reform Act of 1995. We caution investors that any forward-looking statements presented in this prospectus or any prospectus supplement or the documents incorporated by reference herein or therein, or those that we may make orally or in writing from time to time, are based upon management's beliefs and assumptions and are made based on information available to us as of the time made. We undertake no obligation to publicly update or revise any

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forward-looking statements included or incorporated by reference in this prospectus or any prospectus supplement or to update the reasons why actual results could differ from those contained in such statements, whether as a result of new information, future events or otherwise, except to the extent required by federal securities laws. Forward-looking statements may be contained in this prospectus or any prospectus supplement (and the documents incorporated by reference herein or therein) under Risk Factors, or may be contained in our Annual Report on Form 10-K or in our Quarterly Reports on Form 10-Q under headings such as Management's Discussion and Analysis of Financial Conditions and Results of Operations and Business, or in our Current Reports on Form 8-K, among other places. Any investor in us should consider all risks and uncertainties disclosed in our filings with the SEC described below under the heading Where You Can Find More Information, all of which are accessible on the SEC's website at www.sec.gov.

USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement, we anticipate that the net proceeds from the sale of the securities under this prospectus will be used for general corporate purposes. General corporate purposes may include repayment of debt, capital expenditures, and any other purposes that we may specify in any prospectus supplement. In addition, we may use a portion of any net proceeds to acquire complementary products, technologies or businesses. We will have significant discretion in the use of any net proceeds. Investors will be relying on the judgment of our management regarding the application of the proceeds of any sale of the securities. We may invest the net proceeds temporarily until we use them for their stated purpose.

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DESCRIPTION OF CAPITAL STOCK

The following description of our common stock and preferred stock, together with the additional information we include in any applicable prospectus supplement, summarizes the material terms and provisions of the common stock and the preferred stock that we may offer pursuant to this prospectus. While the terms we have summarized below will apply generally to any future common stock or preferred stock that we may offer, we will describe the particular terms of any class or series of these securities in more detail in the applicable prospectus supplement. For the complete terms of our common stock and preferred stock, please refer to our restated certificate of incorporation, as amended, or our certificate of incorporation, and our amended and restated bylaws, as amended, or our bylaws, which are exhibits to the registration statement of which this prospectus is a part. The terms of these securities may also be affected by the General Corporation Law of the State of Delaware. The summary below and that contained in any prospectus supplement is qualified in its entirety by reference to our certificate of incorporation and our bylaws, as either may be amended from time to time after the date of this prospectus, but before the date of any such prospectus supplement.

Authorized Capitalization

We have 252,000,000 shares of capital stock authorized under our certificate of incorporation, consisting of 250,000,000 shares of common stock and 2,000,000 shares of preferred stock, of which 706,829 have been designated as Series A Convertible Preferred Stock, par value \$0.001 per share, or Series A Preferred Stock. As of March 31, 2011, we had 33,023,687 shares of common stock outstanding and 611,523 shares of our Series A Preferred Stock outstanding. Our authorized shares of common stock and preferred stock are available for issuance without further action by our stockholders, unless such action is required by applicable law or the rules of any stock exchange or automated quotation system on which our securities may be listed or traded. If the approval of our stockholders is not so required, our board of directors may determine not to seek stockholder approval.

Common Stock

Holders of our common stock are entitled to such dividends as may be declared by our board of directors out of funds legally available for such purpose, subject to any preferential dividend rights of any then outstanding preferred stock. The shares of common stock are neither redeemable nor convertible. Holders of common stock have no preemptive or subscription rights to purchase any of our securities.

Each holder of our common stock is entitled to one vote for each such share outstanding in the holder's name. No holder of common stock is entitled to cumulate votes in voting for directors.

In the event of our liquidation, dissolution or winding up, the holders of our common stock are entitled to receive pro rata our assets that are legally available for distribution, after payments of all debts and other liabilities and subject to the prior rights of any holders of preferred stock then outstanding. All of the outstanding shares of our common stock are, and the shares of common stock issued upon the conversion of any securities convertible into our common stock will be, fully paid and non-assessable. The shares of common stock offered by this prospectus or upon the conversion of any preferred stock or debt securities or exercise of any warrants offered pursuant to this prospectus, when issued and paid for, will also be, fully paid and non-assessable.

Our common stock is listed on the NASDAQ Capital Market under the symbol **SCON**. Registrar & Transfer Company is the transfer agent and registrar for our common stock. Its address is 10 Commerce Drive, Cranford, NJ 07016, and its telephone number is (800) 866-1340.

Preferred Stock

Our certificate of incorporation permits us to issue up to 2,000,000 shares of preferred stock in one or more series and with rights and preferences that may be fixed or designated by our board of directors without any

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further action by our stockholders. We currently have 706,829 shares of our Series A Preferred Stock designated, and as of March 31, 2011, we had 611,523 shares of our Series A Preferred Stock outstanding.

Subject to the limitations prescribed in our certificate of incorporation and under Delaware law, our certificate of incorporation authorizes the board of directors, from time to time by resolution and without further stockholder action, to provide for the issuance of shares of preferred stock, in one or more series, and to fix the designation, powers, preferences and other rights of the shares and to fix the qualifications, limitations and restrictions thereof. Although our board of directors has no present intention to issue any additional preferred stock, the issuance of preferred stock could adversely affect the rights of holders of our common stock, including with respect to voting, dividends and liquidation, by issuing shares of preferred stock with certain voting, conversion and/or redemption rights. Such issuance of preferred stock may have the effect of delaying, deferring or preventing a change of control.

Preferred stock could thus be issued quickly with terms calculated to delay or prevent a change in control of our company or to make removal of management more difficult. Additionally, the issuance of preferred stock may decrease the market price of our common stock. The number of authorized shares of preferred stock may be increased or decreased, but not decreased below the number of shares then outstanding, by the affirmative vote of the holders of a majority of our common stock without a vote of the holders of preferred stock, or any series of preferred stock, unless a vote of any such holder is required pursuant to the terms of such series of preferred stock.

The following description sets forth certain general terms and provisions of the preferred stock we may issue. If we offer convertible preferred stock, such stock will be convertible into shares of our common stock. With respect to any convertible preferred stock or preferred stock (each referred to herein as preferred stock) we may choose to offer, the specific designations and rights will be described in the prospectus supplement relating to the preferred stock offered, including the following terms. Each time that we issue a new series of preferred stock, we will file with the SEC a definitive certificate of designations that will state the designation, powers, preferences, rights and qualifications, limitations and restrictions of that series of preferred stock. In addition, the prospectus supplement relating to that new series of preferred stock will specify the particular amount, price and other terms of that new series. These terms will include:

the designation of the series, which may be by distinguishing number, letter or title;

the number of shares of the series, which number the board of directors may thereafter (except where otherwise provided in the preferred stock designation) increase or decrease (but not below the number of shares thereof then outstanding);

the price at which the preferred stock will be issued;

the dividend rate, the dates on which the dividends will be payable, if any, whether dividends shall be cumulative or noncumulative and other terms relating to the payment of dividends on the preferred stock;

the redemption rights and price or prices, if any, for shares of the series;

whether the preferred stock is redeemable or subject to a sinking fund, and the terms and amount of such sinking fund provided for the purchase or redemption of shares of the series;

the amounts payable on shares of the series, and the special or relative rights of such shares, in the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of our company;

whether the shares of the series shall be convertible into shares of any other class or series, or any other security, of our company or any other corporation, and, if so, the specification of such other class or series or such other security, the conversion price or prices or rate or

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rates, any adjustments thereof, the date or dates as of which such shares shall be convertible and all other terms and conditions upon which such conversion may be made;

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any listing of the preferred stock on any securities exchange;

the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation and dissolution or winding up;

restrictions on the issuance of shares of the same series or of any other class or series;

the voting rights, if any, of the holders of shares of the series, provided that no share of preferred stock of any series will be entitled to more than one vote per share of preferred stock; and

any additional rights, preferences, qualifications, limitations and restrictions of the preferred stock.

Any prospectus supplement filed in connection with an offering of preferred stock will describe all material terms of such series of preferred stock and all material terms of any common stock, if any, issuable upon conversion of such preferred stock. However, the description of the terms of the preferred stock to be set forth in an applicable prospectus supplement will not be complete and will be subject to and qualified in its entirety by reference to the certificate of designations or the certificate of amendment to our certificate of incorporation relating to the applicable series of preferred stock, together with our bylaws. The registration statement of which this prospectus forms a part currently does or will in the future include the certificate of designations or the certificate of amendment and our bylaws as exhibits or incorporate them by reference.

The preferred stock will, if and when issued, be fully paid and non-assessable. The holders of the preferred stock will not have preemptive rights.

Series A Convertible Preferred Stock

In October 2007, in connection with entering into an amended investment agreement with Hunchun BaoLi Communication Co. Ltd., or BAOLI, our board of directors authorized the designation and issuance of 706,829 shares of our Series A Preferred Stock. On January 8, 2008, the terms of the investment agreement with BAOLI were amended, and we issued to BAOLI and two related purchasers a total of 3,101,361 shares of common stock and 611,523 shares of Series A Preferred Stock. Subject to the terms and conditions of our Series A Preferred Stock and to customary adjustments to the conversion rate, each share of our Series A Preferred Stock is convertible into ten shares of our common stock so long as the number of shares of our common stock beneficially owned by BAOLI following such conversion does not exceed 9.9% of our outstanding common stock. Except for a preference on liquidation of \$0.01 per share, each share of Series A Preferred Stock is the economic equivalent of the ten shares of common stock into which it is convertible. Except as required by law, the Series A Preferred Stock will not have any voting rights. For a complete description of the terms of the Series A Preferred Stock, please see the certificate of designations, filed with, and incorporated by reference into, this prospectus.

Anti-Takeover Effects of Certain Provisions of Delaware Law and Our Charter Documents

The following is a summary of certain provisions of Delaware law, our certificate of incorporation and our bylaws. This summary does not purport to be complete and is qualified in its entirety by reference to the corporate law of Delaware and our certificate of incorporation and bylaws.

Effect of Delaware Anti-Takeover Statute. We are subject to Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, Section 203 prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder, unless:

prior to that date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

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upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time

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the transaction commenced, excluding for purposes of determining the number of shares of voting stock outstanding (but not the voting stock owned by the interested stockholder) those shares owned by persons who are directors and officers and by excluding employee stock plans in which employee participants do not have the right to determine whether shares held subject to the plan will be tendered in a tender or exchange offer; or

on or subsequent to that date, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66-2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 defines business combination to include the following:

any merger or consolidation involving the corporation and the interested stockholder;

any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;

subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or

the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation, or who beneficially owns 15% or more of the outstanding voting stock of the corporation at anytime within a three year period immediately prior to the date of determining whether such person is an interested stockholder, and any entity or person affiliated with or controlling or controlled by any of these entities or persons.

Our Charter Documents. Our charter documents include provisions that may have the effect of discouraging, delaying or preventing a change in control or an unsolicited acquisition proposal that a stockholder might consider favorable, including a proposal that might result in the payment of a premium over the market price for the shares held by our stockholders. Certain of these provisions are summarized in the following paragraphs.

Classified Board of Directors. Pursuant to our certificate of incorporation, the number of directors is fixed by our board of directors. Our directors are divided into three classes, each class to serve a three-year term and to consist as nearly as possible of one third of the total number of directors. Pursuant to our bylaws, directors elected by stockholders at an annual meeting of stockholders will be elected by a plurality of all votes cast.

No Stockholder Action by Written Consent. Our bylaws provide that a special meeting of stockholders may be called only by the chairman of the board, a majority of the entire board of directors or the president. Stockholders are not permitted to call, or to require that the board of directors call, a special meeting of stockholders. Moreover, the business permitted to be conducted at any special meeting of stockholders is limited to the business brought before the meeting pursuant to the notice of the meeting given. In addition, our certificate of incorporation provides that any action taken by our stockholders must be effected at an annual or special meeting of stockholders and may not be taken by written consent instead of a meeting. Our bylaws establish an advance notice procedure for stockholders to nominate candidates for election as directors or to bring other business before meetings of our stockholders.

Change in Control Agreements. A number of our executives have agreements with us that entitle them to payments in certain circumstances following a change in control.

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DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of preferred stock or common stock. Warrants may be issued independently or together with preferred stock or common stock and may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a warrant agent. The warrant agreement may provide that, in certain circumstances, we and the warrant agent will be permitted to amend the warrant agreement without the consent of the holders of warrants. The warrant agent will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any registered holders of warrants or beneficial owners of warrants. This summary of certain provisions of the warrants is not complete. You should refer to the warrant agreement, including the forms of warrant certificate representing the warrants, relating to the specific warrants being offered for the complete terms of the warrant agreement and the warrants. The warrant agreement, together with the terms of warrant certificate and warrants, will be filed with the SEC in connection with the offering of the specific warrants.

The particular terms of any issue of warrants will be described in the prospectus supplement relating to the issue. Those terms may include:

the title of such warrants;

the aggregate number of such warrants;

the price or prices at which such warrants will be issued;

the currency or currencies (including composite currencies) in which the price of such warrants may be payable;

the amount and terms of the securities purchasable upon exercise of such warrants and the procedures and conditions relating to the exercise of such warrants;

the purchase price of each of the securities purchasable upon exercise of such warrants;

the date on which the right to exercise such warrants will commence and the date on which such right shall expire;

any provisions for adjustment of the number or amount of securities to be received upon exercise of the warrants or of the exercise price of the warrants;

if applicable, the minimum or maximum amount of such warrants that may be exercised at any one time;

if applicable, the designation and terms of the securities with which such warrants are issued and the number of such warrants issued with each such security;

if applicable, the date on and after which such warrants and the related securities will be separately transferable;

information with respect to book-entry procedures, if any; and

any other terms of such warrants, including terms, procedures, conditions and limitations relating to the exercise of such warrants. The prospectus supplement relating to any warrants to purchase equity securities may also include, if applicable, a discussion of certain U.S. federal income tax and ERISA considerations.

Warrants for the purchase of preferred stock and/or common stock will be offered and exercisable for U.S. dollars only. Warrants will be issued in registered form only.

Each warrant will entitle its holder to purchase the number of shares of preferred stock or common stock at the exercise price set forth in, or calculable as set forth in, the applicable prospectus supplement. The applicable

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prospectus supplement will also describe the circumstances pursuant to which the exercise price and/or the number or amount of the securities to be issued upon exercise of the warrants would be adjusted and the method of making and notifying the holder of any such adjustment.

After the close of business on the applicable expiration date, unexercised warrants will become void. We will specify the place or places where, and the manner in which, warrants may be exercised in the applicable prospectus supplement.

Upon receipt of payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will, as soon as practicable, issue and deliver the purchased securities in the manner described in the applicable prospectus supplement. If less than all of the warrants represented by the warrant certificate are exercised, a new warrant certificate will be issued for the remaining unexpired warrants.

Prior to the exercise of any warrants to purchase preferred stock or common stock, holders of the warrants will not have any of the rights of holders of the preferred stock or common stock purchasable upon exercise, including the right to vote or to receive any payments of dividends on the preferred stock or common stock purchasable upon exercise.

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PLAN OF DISTRIBUTION

We may sell the securities being offered hereby in one or more of the following ways from time to time:

through agents to the public or to investors;

to underwriters for resale to the public or to investors;

directly to investors; or

through a combination of any of these methods of sale.

We will set forth in a prospectus supplement the terms of that particular offering of securities, including:

the name or names of any agents or underwriters;

the purchase price of the securities being offered and the proceeds we will receive from the sale;

any over-allotment options under which underwriters may purchase additional securities from us;

any agency fees or underwriting discounts and other items constituting agents or underwriters compensation;

any initial public offering price;

any discounts or concessions allowed or reallocated or paid to dealers; and

any securities exchanges or markets on which such securities may be listed.

We have been advised by the Financial Industry Regulatory Authority, or FINRA, that the maximum commission or discount to be received by any FINRA member or independent broker-dealer in connection with any sales of securities being offered hereby is 8%.

Agents

We may designate agents who agree to use their reasonable efforts to solicit purchases of our securities for the period of their appointment or to sell our securities on a continuing basis.

Underwriters

If we use underwriters for a sale of securities, the underwriters will acquire the securities for their own account. The underwriters may resell the securities in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable

underwriting agreement. The underwriters will be obligated to purchase all the securities of the series offered if they purchase any of the securities of that series. We may change from time to time any initial public offering price and any discounts or concessions the underwriters allow or reallow or pay to dealers.

Direct Sales

We may also sell securities directly to one or more purchasers without using underwriters or agents. Underwriters, dealers and agents that participate in the distribution of the securities may be underwriters as defined in the Securities Act, and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the Securities Act. To the extent known to us, we will identify in the applicable prospectus supplement any underwriters, dealers or agents and will describe their compensation.

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Derivative Securities

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement (or a post-effective amendment).

Trading Markets and Listing of Securities

Unless otherwise specified in the applicable prospectus supplement, each class or series of securities will be a new issue with no established trading market, other than our common stock, which is listed on the NASDAQ Capital Market. We may elect to list any other class or series of securities on any exchange or market, but we are not obligated to do so. It is possible that one or more underwriters may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the securities.

Stabilization Activities

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of these activities at any time.

Passive Market Making

Any underwriters who are qualified market makers on the NASDAQ Capital Market may engage in passive market making transactions in the securities on the NASDAQ Capital Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security. If all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

Material Relationships

We may use underwriters, dealers and agents with whom we have a material relationship. To the extent required, we will describe the nature of any such relationship in any prospectus supplement naming any such underwriter, dealer or agent. Underwriters, dealers and agents may engage in transactions with or perform services for us in the ordinary course of their businesses, and we will include in any prospectus supplement any required disclosure related to such transactions or services. We may have agreements with the underwriters, dealers and agents to indemnify them against specified civil liabilities, including liabilities under the Securities Act.

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LEGAL MATTERS

Certain legal matters relating to the validity of the common stock, preferred stock and warrants offered by this prospectus will be passed upon for us by Manatt, Phelps & Phillips, LLP, Los Angeles, California.

EXPERTS

The consolidated financial statements of Superconductor Technologies Inc. incorporated in this prospectus by reference to the Annual Report on Form 10-K of Superconductor Technologies Inc. for the year ended December 31, 2010: (i) as of and for the year ended December 31, 2010 have been so incorporated in reliance on the report (which contains an explanatory paragraph related to the company's ability to continue as a going concern) of Marcum LLP, independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting and (ii) as of December 31, 2009 and for the two year period ended December 31, 2009 have been so incorporated in reliance on the report (which contains an explanatory paragraph related to the company's ability to continue as a going concern) of Stonefield Josephson, Inc., independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference information that we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus, and the information that we file later with the SEC will automatically update and supersede this information. The following documents have been previously filed by us with the SEC pursuant to the Exchange Act and are hereby incorporated by reference in this prospectus and the registration statement of which this prospectus forms a part:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2010 filed with the SEC on March 21, 2011, including portions incorporated by reference therein to our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 7, 2011;

our Current Reports on Form 8-K filed with the SEC on February 4, 2011 and February 9, 2011; and

the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on January 4, 1993. Certain Current Reports on Form 8-K dated both prior to and after the date of this prospectus are or will be furnished to the SEC and shall not be deemed filed with the SEC and will not be incorporated by reference into this prospectus. However, all other reports and documents filed by us after the date of this prospectus under Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the termination of the offering of the securities covered by this prospectus will also be deemed incorporated by reference in this prospectus and considered to be part of this prospectus from the date those documents are filed. If you make a request, orally or in writing, for any information that has been incorporated by reference into this prospectus but not delivered with this prospectus, we will provide you, without charge, a copy of any or all of that information. Requests for this information should be submitted in writing to our Secretary, at our principal executive offices at Superconductor Technologies Inc., 460 Ward Drive, Santa Barbara, California 93111-2310 or by telephone at (805) 690-4500.

This prospectus is part of a registration statement we have filed with the SEC. You should rely only on the information incorporated by reference or provided in this prospectus, or any prospectus supplement. No one else is authorized to provide you with different information. You should not rely on any other representations. We are not making an offer of these securities in any state where the offer is not permitted. Our affairs may change after this prospectus or any prospectus supplement is distributed. You should not assume that the information in or incorporated by reference into this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of those documents. You should read all information supplementing or incorporated by reference into this prospectus or any prospectus supplement.

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WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. The SEC also maintains a web site that contains reports, proxy and information statements, and other information regarding registrants that file electronically with the SEC at <http://www.sec.gov>. In addition, we maintain a web site that contains information about us at <http://www.suptech.com>. The information contained on or that may be obtained from our website is not, and shall not be deemed to be, a part of this prospectus.

We have filed with the SEC a registration statement on Form S-3, of which this prospectus is a part, including exhibits, schedules and amendments filed with, or incorporated by reference in, this registration statement, under the Securities Act, with respect to the securities registered thereby. This prospectus does not contain all of the information set forth in the registration statement and exhibits and schedules to the registration statement. For further information with respect to our company and the securities registered thereby, reference is made to the registration statement, including the exhibits to the registration statement. Statements contained in this prospectus as to the contents of any contract or other document referred to in, or incorporated by reference in, this prospectus are not necessarily complete and, where that contract is an exhibit to the registration statement, each statement is qualified in all respects by the exhibit to which the reference relates. Copies of the registration statement, including the exhibits and schedules to the registration statement, may be examined and copied (upon payment of applicable fees) at the SEC's Public Reference Room at 100 F Street, N.E., Washington D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. The registration statement is also available to you on the SEC's web site, <http://www.sec.gov>.

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2,365,000 shares of Common Stock

Warrants to Purchase 1,773,750 shares of Common Stock

1,773,750 shares of Common Stock Underlying the Warrants

PROSPECTUS SUPPLEMENT

RODMAN & RENSHAW, LLC

February 20, 2012