

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

FORM 10-K

ANNUAL REPORT
PURSUANT TO SECTIONS 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.

For the fiscal year ended December 31, 2018

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934.

For the transition period from _____ to _____

Commission File Number 0-21074

SUPERCONDUCTOR TECHNOLOGIES INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

77-0158076
(IRS Employer
Identification No.)

9101 Wall Street, Suite 1300, Austin, Texas 78754
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (512) 334-8900
Securities registered pursuant to Section 12(b) of the Act:

Title of each class
Common stock, \$0.001 par value

Name of each exchange on which registered
The NASDAQ Stock Market, LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes or No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes or No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes or No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes or No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes or No

The aggregate market value of the common stock held by non-affiliates was \$9.6 million as of June 29, 2018 (the last business day of our most recently completed second fiscal quarter). The closing price of the common stock on that date was \$9.20 as reported by the NASDAQ Capital Market. For purposes of this determination, we excluded the shares of common stock held by each officer and director and by each person who was known to us to own 10% or more of the outstanding common stock as of June 29, 2018. The exclusion of shares owned by the aforementioned individuals and entities from this calculation does not constitute an admission by any of such individuals or entities that he or it was or is an affiliate of ours.

We had 3,802,609 shares of common stock outstanding as of the close of business on March 21, 2019.

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SUPERCONDUCTOR TECHNOLOGIES INC.

FORM 10-K ANNUAL REPORT
Year Ended December 31, 2018

Unless otherwise noted, the terms “we,” “us,” and “our” refer to the combined and ongoing business operations of Superconductor Technologies Inc. and its subsidiaries

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-k (this "Report") contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. We claim the protection of the safe harbor contained in the Private Securities Litigation Reform Act of 1995 for these forward looking statements. Our 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 Report 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," "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates" and other comparable terminology.

We caution investors that any forward-looking statements presented in this Report, or that we may make orally or in writing from time to time, are based on the beliefs of, assumptions made by, and information currently available to, us. Such statements are based on assumptions 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.

Some of the risks and uncertainties that may cause our actual results, performance or achievements to differ materially from those expressed or implied by forward-looking statements include the following:

- our limited cash and a history of losses;*
- our need to materially grow our revenues from commercial operations and/or to raise additional capital (which financing may not be available on acceptable terms or at all) to continue to implement our current business plan and maintain our viability, with our existing cash reserves only expected to be sufficient into the third quarter of 2019;*
- the performance and use of our equipment to produce wire in accordance with our timetable;*
- overcoming technical challenges in attaining milestones to develop and manufacture commercial lengths of our high temperature superconducting (HTS) wire;*
- the possibility of delays in customer evaluation and acceptance of our HTS wire;*
- the limited number of potential customers and customer pressures on the selling prices of our products;*
- the limited number of suppliers for some of our components and our HTS wire;*
- there being no significant backlog from quarter to quarter;*
- our market being characterized by rapidly advancing technology;*
- the impact of competitive products, technologies and pricing;*
- manufacturing capacity constraints and difficulties;*
- the impact of any financing activity on the level of our stock price;*
- the dilutive impact of any issuances of securities to raise capital;*
- cost and uncertainty from compliance with environmental regulations;*
- local, regional, and national and international economic conditions and events, and the impact they may have on us and our customers, and;*

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- *if we fail to maintain the listing of our common stock with a U.S. national securities exchange, the liquidity of our common stock could be adversely affected.*

For further discussion of these and other factors see, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Risk Factors” in this Report.

This Report and all subsequent written and oral forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We do not undertake any obligation to release publicly any revisions to our forward-looking statements to reflect events or circumstances after the date of this Report.

PART I

ITEM 1. BUSINESS

General

We are a leading company in developing and commercializing high temperature superconductor (“HTS”) materials and related technologies. Superconductivity is the unique ability to conduct electricity 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. This resistance requires power to overcome and generates heat. HTS materials can substantially improve the performance characteristics of electrical systems, reduce power loss, and lower heat generation providing extremely high current carrying density and zero resistance to direct current.

We were established in 1987 shortly after the discovery of HTS materials. Our stated objective was to develop products based on these materials for the commercial marketplace.

After analyzing the market opportunities available, we decided to develop products for the utility and telecommunications industries.

Our initial product was completed in 1998 and we began delivery to a number of wireless network providers. In the following 13 years, we continued to refine and improve the platform, with the primary focus on improving reliability, increasing performance and runtime, and most importantly, removing cost from the manufacturing process of the required subsystems. Our cost reducing efforts led to the invention of our proprietary, high-yield and high throughput HTS material deposition manufacturing process.

In late 2010, we transitioned our research and development efforts to adapting our proprietary HTS material deposition techniques to the production of our HTS Conductus® wire for next generation power applications, which is our primary opportunity to grow our future revenues.

In November 2016, we were selected as the prime recipient of the \$4.5 million program award provided by the U.S. Department of Energy’s (DOE) Office of Energy Efficiency and Renewable Energy (EERE), on behalf of the Advanced Manufacturing Office, for its Next Generation Electric Machines (NGEM) program and, in June 2017, the related contract was finalized and we have commenced work under that contract. See ‘*Other Assets and Investments*’ below.

In early 2018, we announced the concentration of our future Conductus wire product development efforts on NGEM to capitalize on several accelerating energy megatrends. This refined focus is very synergistic with our program with the Department of Energy (DOE) award for the development of superconducting wire to enable NGEM.

Our Proprietary Technology

Our development efforts over the last 30 years have yielded an extensive patent portfolio as well as critical trade secrets, unpatented technology and proprietary knowledge. We have an extensive patent portfolio in addition to critical trade secrets, unpatented technology and proprietary knowledge. In June 2016, we were awarded U.S. Patent No. 9,362,025 from the U.S. Patent and Trademark Office (USPTO) further protecting our unique capabilities for improving the performance of our Conductus superconducting wire in applications that utilize the advantages for operating in the presence of high magnetic field. In February 2017 we were awarded two patents from the USPTO: U.S. Patent No. 9,564,258, associated with U.S. Patent No. 9,362,025, providing additional protection for the foundation from which we will build high performance wire for our customers, and U.S. Patent No. 9,567,661 protecting the system design developed by STI to improve monitoring efficiency when

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evaporating materials in vacuum. In July 2017, EU patent 2188495 (08797906.8) was granted, this patent follows the U.S. Patent granted by U.S. 8,607,560. This patent is focused on METHOD FOR CENTERING RECIPROCATING BODIES AND STRUCTURES MANUFACTURED THEREWITH, related to our Sapphire Cryocooler. Our current patents expire at various dates from 2019 to 2034. We enter into confidentiality and non-disclosure agreements with our employees, suppliers and consultants to protect our proprietary information.

Our strategic plan is to utilize our core proprietary technology in superconductivity and leverage our proprietary manufacturing processes to build Conductus wire for use in electrical power devices, including NGEM and tokamak fusion devices. As discussed above, we are adapting our unique HTS material deposition techniques to produce our energy efficient, cost-effective and high performance Conductus wire technology for next generation power applications. We have identified three energy market megatrends that can be addressed by superconducting wire: decentralized renewable energy, high energy efficiency and sustainable transportation. We are working with leading industry device manufacturers to complete qualification and acceptance testing of Conductus wire. Our plan is for significant commercial production of Conductus wire following completion of qualification orders.

Our development efforts (including those described under “Our Future Business” below) can take a significant number of years to commercialize, and we must overcome significant technical barriers and deal with other significant risks, some of which are set out in our public filings, including in particular the “Risk Factors” included in Item 1A of this Report.

Our Future Business

We have created several unique capabilities and HTS manufacturing systems related to our Conductus wire platform that we are seeking to produce by leveraging our leadership in superconducting technologies, extensive intellectual property and HTS manufacturing expertise.

HTS Wire Platform

Our Conductus wire products are used in large markets where the advantages of HTS wire are recognized. Our product roadmap currently focuses on superconducting high field magnets used in tokamak fusion devices, including those used in next generation electrical machines (NGEM). Other potential targets for our technology include superconducting high power transmission cable, and superconducting fault current limiters (SFCL).

Our Current Product Focus

Superconducting High Field magnets:

There are a variety of applications that utilize superconducting magnets in order to capitalize on their unique ability to create extremely high magnetic fields. The NMR and MRI machines of today utilize such superconducting magnets for this very reason. Currently, high-field superconducting magnets are manufactured using commercially available superconducting wire such as niobium-titanium (NbTi) or niobium-tin (Nb3Sn). NMR and MRI device manufacturers and manufacturers of other NGEM look towards advances in superconducting technologies to improve the overall performance of their systems by dramatically increasing the magnetic fields while reducing size. In fusion science, the leading state-of-the-art tokamak, a device which uses a powerful magnetic field to confine a hot plasma has been limited to NbTi and Nb3Sn material. High demand for a robust, high performance and low cost superconducting wire has spurred rapid development of a next generation alternative. In the last 10 years, new second generation (2G) Rare Earth, Barium, Copper Oxide (ReBCO) superconducting materials have been proven to drastically increase magnetic field strengths, especially at low temperatures. These advanced ReBCO based superconductors now provide an excellent alternative to NbTi and Nb3Sn based materials.

Other Potential Targets For Our Technology

Superconducting High Power Transmission Cable:

Superconducting high power transmission and distribution cable transmit 5 to 10 times the electrical current of traditional copper or aluminum cables with significantly improved efficiency. HTS power cable systems consist of the cable, which is comprised of 100's of strands of HTS wire wrapped around a copper core, and the cryogenic cooling system to maintain proper operating conditions. HTS power cables are particularly suited to high load areas such as the dense urban business districts of large cities, where purchases of easements and construction costs for traditional low capacity cables may be cost prohibitive. The primary application for HTS cables is medium voltage feeds to load pockets in dense urban areas. In these high demand zones the grid is often saturated with aging infrastructure. HTS technology brings a considerable amount of power to new locations where the construction of additional transmission to distribution substations, with major transformer assets, is not feasible. Another potential use of HTS power cable is to improve grid power transmission by connecting two existing substations. In dense urban environments many substations often reach capacity limits and require redundant transformer capacity to improve reliability. HTS cables can tie these existing stations together, avoiding very costly transformer upgrades and construction costs.

Superconducting Fault Current Limiter (SFCL):

With power demand on the rise and new power generation sources being added, the grid has become overcrowded and vulnerable to catastrophic faults. Faults are abnormal flows of electrical current like a short circuit. As the grid is stressed, faults and power blackouts increase in frequency and severity. SFCLs act like powerful surge protectors, preventing harmful faults from taking down substation equipment by reducing the fault current to a safer level (20 – 50% reduction) so that the existing switchgear can still protect the grid. Currently, electrical-utilities use massive 80kA circuit breakers, oversized transformers and fuses to prevent faults from damaging their equipment and protecting against surges. However, once a fault has occurred, standard circuit breakers suffer destructive failure and need to be replaced before service can be restored. In addition, Smart Grid and embedded alternative energy generation enhancements will increase the need for SCFLs. Grid operators face a major challenge in moving power safely and efficiently, from generators to consumers, through several stages of voltage transformation step downs and step ups. At each stage, valuable energy is lost in the form of waste heat. Moreover, while demands are continually rising, space for transformers and substations — especially in dense urban areas — is severely limited. Conventional oil-cooled transformers pose a fire and environmental hazard. Compact, efficient superconducting transformers, by contrast, are cooled by safe, abundant and environmentally benign liquid nitrogen. As an additional benefit, these actively-cooled devices will offer the capability of operating in overload, to twice the nameplate rating, without any loss of life to meet occasional utility peak load demands.

Other Assets and Investments

In November 2016, we were selected as the prime recipient of the \$4.5 million program award provided by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy, on behalf of the Advanced Manufacturing Office, for its Next Generation Electric Machines (NGEM) program. We are collaborating in this program with TECO-Westinghouse Motor Company, an industry leading manufacturer of electric generators and motors, and the Massachusetts Institute of Technology and University of North Texas. The combined team will focus on improving the manufacturing process of superconductive wires to improve performance and yield while reducing cost at high enough temperatures where nitrogen can be used as the cryogenic fluid. Advancing these enabling technologies has the potential to boost the competitiveness of American manufacturers and take the development of more efficient electric machines a giant step further. These technology R&D projects aim to significantly improve industrial motors for manufacturing, helping companies who use these motors in manufacturing save energy and money over the long run.

In September 2014, STI and Robinson Research Institute entered a strategic agreement to jointly engage end customers and partners in the building of superconductor products utilizing our Conductus superconducting wire

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and Robinson Research Institute's superconducting device technology. The Robinson Research Institute, based at Victoria University of Wellington in New Zealand, has unique capabilities in the production of HTS Roebel cable used in superconducting machines and magnets, and in the development of HTS MRI and HTS transformers. The Robinson Research Institute has been a valuable ally as we prepare for the commercial launch of Conductus wire; Robinson's performance characterization expertise and applications knowledge are truly impressive. Robinson is an expert in the development of innovative superconducting products. Jointly, we have identified initial projects including applications such as rotating machines, transformers, scientific magnets and MRI systems. Additionally, Robinson and its partners have a strong focus on Asia and we believe our agreement will help us expand our reach into that fast-growing market. Working alongside many industry leaders, the Robinson Research Institute and its partners have built superconducting devices for the energy industry, recently completing a transformer for use in the electrical grid. In the healthcare market, Robinson has focused on applications of MRI systems where HTS wire gives a competitive advantage.

In 2007, we formed a joint venture with Hunchun BaoLi Communication Co. Ltd. ("BAOLI") for the purpose of manufacturing and selling our SuperLink interference elimination solution in China. The joint venture was subsequently terminated prior to our joint venture partner and us providing our capital and technology contributions and our obligations were terminated.

Licenses

We grant licenses for our technology to other companies. We have granted licenses to, among others, (1) Bruker for Nuclear Magnetic Resonance application, (2) General Dynamics for government applications, (3) Star Cryoelectronics for Superconducting Quantum Interference Device applications and (4) Theva for network infrastructure wireless electronic devices.

Government Contracts

For 2018 and 2017, government related contracts accounted for 100% and 98%, respectively, of our revenues. Going forward, as we focus our efforts on production of our Conductus wire for next generation power applications, we expect these contract revenues to be a less significant part of our revenues.

Manufacturing

Our manufacturing process involves the operation of sophisticated production equipment and material handling by production technicians. We purchase inventory components and manufacture inventory based on existing customer purchase requests, and to a lesser extent, on sales forecasts. Our Austin, Texas facility addresses our growth expectations for our superconducting wire initiative. The opening of this facility coincided with the delivery of our first superconducting wire production equipment in early 2012. Sales of our Conductus wire are expected to increase as we move to commercial production of Conductus wire following completion of qualification orders.

A number of components used in our products are available from only a limited number of outside suppliers due to unique designs, as well as certain quality and performance requirements. We do not have guaranteed supply arrangements with any of these suppliers, do not maintain an extensive inventory of parts or components and customarily purchase sole or limited source parts and components pursuant to purchase orders. Our reliance on sole or limited source suppliers involves certain risks and uncertainties, many of which are beyond our control, and some of which are set out in our public filings, including in particular the "Risk Factors" included in Item 1A of this Report.

Marketing and Sales

We utilize a direct selling model due to the concentrated customer base for superconducting wire.

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Competition

We face competition in various aspects of our technology and product development. Our products compete on the basis of performance, functionality, reliability, pricing, quality and compliance with industry standards. Our primary competitors include American Superconductor (AMSC), SuperPower (Furukawa), SuNam, Bruker, Shanghai Superconductor, BASF, SuperOx, Fujikura, Sumitomo, Shanghai Creative Superconductor Technologies Co., Ltd (SCSC), Oxolutia, MetOx, THEVA, Showa Cable Systems (SWCC), and Suzhou Advanced Materials Research Institute (SAMRI).

Research and Development

Our 2016 through 2018 research and development activities were focused entirely on developing our Conductus wire product. We spent a total of \$2.4 million, \$2.6 million and \$2.8 million for 2018, 2017 and 2016, respectively, on research and development.

Environmental Issues

We use certain hazardous materials in our research, development and manufacturing operations. As a result, we are subject to stringent federal, state and local regulations governing the storage, use and disposal of such materials. Current or future laws and regulations could require substantial expenditures for preventative or remedial action, reduction of chemical exposure, waste treatment or disposal. Although we believe that our safety procedures for the handling and disposing of hazardous materials comply with the standards prescribed by state and federal regulations, there is always the risk of accidental contamination or injury from these materials. To date, we have not incurred substantial expenditures for preventive action with respect to hazardous materials or for remedial action with respect to any hazardous materials accident. However, the use and disposal of hazardous materials involves the risk that we could incur substantial expenditures for such preventive or remedial actions. If such an accident were to occur, we could be held liable for resulting damages. The liability in the event of an accident or the costs of such remedial actions could exceed our resources or otherwise have a material adverse effect on our financial condition, results of operations or cash flows.

Corporate Information

Our facilities and principal executive offices are located at 9101 Wall Street, Suite 1300, Austin, Texas 78754. Our telephone number is (512) 334-8900. We were incorporated in Delaware on May 11, 1987. Additional information about us is available on our website at www.supotech.com. The information on our web site is not incorporated herein by reference.

Employees

As of December 31, 2018, we had a total of 25 full time employees. None of our employees are represented by a labor union, and we believe that our employee relations are good.

Backlog

Our commercial backlog consists of accepted product purchase orders with scheduled delivery dates during the next twelve months. We had commercial backlog of \$151,000 at December 31, 2018, compared to \$48,000 at December 31, 2017. At December 31, 2018 and December 31, 2017, in addition to this commercial backlog, we had evaluation and qualification orders with unspecified delivery dates for \$80,000 and \$80,000, respectively.

ITEM 1A. RISK FACTORS

The following section includes some of the material factors that may adversely affect our business and operations. This is not an exhaustive list, and additional factors could adversely affect our business and financial performance. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors emerge from time to time and it is not possible for us to predict all such risk factors, nor can we assess the impact of all such risk factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. This discussion of risk factors includes many forward-looking statements. For cautions about relying on such forward looking statements, please refer to the section entitled “Forward Looking Statements” at the beginning of this Report immediately prior to Item 1.

Risks Related to Our Business

We have a history of losses and may never become profitable.

In each of our last five years, we have experienced significant net losses and negative cash flows from operations. In 2018, we incurred a net loss of \$8.1 million and had negative cash flows from operations of \$6.9 million. In 2017, we incurred a net loss of \$9.5 million and had negative cash flows from operations of \$7.4 million. Our independent registered public accounting firm has included in its audit reports an explanatory paragraph expressing substantial doubt about our ability to continue as a going concern. If we fail to increase our revenues, we may not achieve and may not maintain profitability, we may not realize our investment in infrastructure, and may not meet our expectations or the expectations of financial analysts who report on our stock.

We may need to raise additional capital. If we are unable to raise capital, our ability to implement our current business plan and ultimately our viability as a company could be adversely affected.

At December 31, 2018, we had \$5.6 million in cash and cash equivalents. Our current forecast is that our existing cash resources will be sufficient to fund our planned operations into the third quarter of 2019. Our cash resources may therefore not be sufficient to fund our business through the end of the current fiscal year. Therefore, unless we can materially grow our revenues from commercial operations during such period, we will need to raise additional capital during this fiscal year ending December 31, 2019 to continue to implement our current business plan and maintain the viability of the Company.

We believe the key factors to our future liquidity will be our ability to successfully use our expertise and our technology to generate revenues in various ways, including commercial operations, joint ventures and licenses. Because of the expected timing and uncertainty of these factors, we will need to raise funds to meet our working capital needs.

Additional financing may not be available on acceptable terms or at all. If we issue additional equity securities to raise funds, the ownership percentage of our existing stockholders would be reduced. New investors may demand rights, preferences or privileges senior to those of existing holders of common stock and could also require that we issue warrants in connection with sales of our stock. If we cannot raise any needed funds to grow our commercial resources, we might be forced to make changes to, or delay aspects of, our business plan which could adversely affect our ability to implement our current business plan and ultimately our viability as a company.

Our strategic initiative to develop a new wire platform may not prove to be successful and our decision to focus our research and development efforts on next generation power applications (NGEM) may not be the most advantageous market opportunity for HTS.

We have spent a considerable amount of resources in developing a new wire platform for power applications. In late 2010, we transitioned our research and development efforts to adapting our proprietary HTS

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material deposition techniques to the production of our HTS Conductus wire. In early 2018, we announced the concentration of our future Conductus wire product development efforts on NGEM to capitalize on several accelerating energy megatrends. While this refined focus is very synergistic with our program with the Department of Energy (DOE) award for the development of superconducting wire to enable NGEM, other applications for the use of HTS wire may ultimately prove to have been more advantageous to us had we not focused on NGEM.

Substantial technical and business challenges remain before we can 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, stock price and carrying value of our fixed assets.

There are numerous technological challenges that must be overcome in order for our Conductus wire to become commercially successful and our ability to address such technological challenges may adversely affect our ability to gain customers.

Our plan is for commercial production of Conductus wire following completion of qualification orders. We have experienced in the past, and may continue to experience, delays in achieving commercial production of Conductus. Commercialization can be delayed, among other factors, by technological challenges as we seek to improve our products and processes, delays from customer qualification orders and customer analysis of those orders, and decisions made by our customers with respect to post-qualification orders. Many of the factors that affect successful commercialization of our products are affected by third party decisions.

Conductus wire is uniquely positioned to address three key technical challenges in the market: high performance, improved economics and commercial-scale capacity. To date, we, along with existing HTS wire manufacturers, have not overcome these challenges to allow for broad commercialization of HTS wire. Customers cannot purchase long-length wire with any reasonable confidence or guaranteed volume; and electric utilities lack confidence in product availability which leads to delays in their deployment roadmap. HTS wire performance is currently below what many customers require. Many power applications require high performance wire with high current carrying capacity, mechanical durability, electrical integrity with low AC losses and minimal splices. Producing high performance HTS wire has proven difficult, especially at volumes required for large scale deployment. The high demand for high performance wire available in very low volume results in a high wire price that narrows the market and limits commercial viability.

We have made significant progress in these areas, however delays in our Conductus wire development, as a result of technological challenges or other factors, may result in the introduction or commercial acceptance of our Conductus wire products later than expected.

The commercial uses of superconducting wire and superconducting wire related products are limited today, and a broad commercial market may not develop.

Even if the technological hurdles are overcome, there is no certainty that a robust commercial market for unproven HTS wire products will come to fruition. To date, commercial use of HTS wire has been limited to small feasibility demonstrations, and these projects are largely subsidized by government authorities. While customer demand is high and market forecasts project large revenue opportunity for superconducting wire in power applications, the market may not develop and superconducting wire might never achieve long term, broad commercialization. In such an event, we would not be able to commercialize our Conductus wire initiative and our business could be adversely impacted.

We have limited experience marketing and selling superconducting wire products, and our failure to effectively market and sell our superconducting wire solutions would lower our revenue and cash flow.

We have limited experience marketing and selling our Conductus wire. Once our Conductus wire is ready for commercial use, we will have to hire and develop a marketing and sales team to effectively demonstrate the

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advantages of our product over both more traditional products and competing superconducting products or other adjacent technologies. We may not be successful in our efforts to market this new technology.

We expect continued customer pressures to reduce our product pricing which may adversely affect our ability to operate on a commercially viable basis.

We expect to face pressure to reduce prices and accordingly, the average selling price of our Conductus wire. We anticipate customer pressure on our product pricing will continue for the foreseeable future. HTS wire is currently being sold at \$250/kiloampere-meter (kA-m). At this price, HTS wire represents a significant cost of the end device. A price reduction is required for long term commercialization. Cryogenic systems, including cryocoolers and cryostats, have been developed but will also need to be cost optimized as HTS wire becomes available in volume. We have plans to further reduce the manufacturing cost of our products, but there is no assurance that our future cost reduction efforts will keep pace with price erosion. We will need to further reduce our manufacturing costs through engineering improvements and economies of scale in production and purchasing in order to achieve adequate gross margins. We may not be able to achieve the required product cost savings at a rate needed to keep pace with competitive pricing pressure. Additionally, we may be forced to discount future orders or may never reach commercial viability. If we fail to reach our cost saving objectives or we are required to offer future discounts, our business may be harmed.

We face competition with respect to various aspects of our technology and product development.

Our current wireless products compete on the basis of performance, functionality, reliability, pricing, quality, and compliance with industry standards. With respect to our Conductus wire materials, our competition includes American Superconductor (AMSC), SuperPower (Furukawa), SuNam, Bruker, Shanghai Superconductor, BASF, SuperOx, Fujikura, Sumitomo, THEVA, Showa Cable Systems (SWCC), and Suzhou Advanced Materials Research Institute (SAMRI). In addition, we currently supply components and license technology to several companies that may eventually decide to manufacture or design their own HTS components, rather than purchasing or licensing our technology. If we are unable to compete successfully against our current or future competitors, then our business and results of operations will be adversely affected.

We may not be able to compete effectively against alternative technologies.

Our products also compete with a number of alternative approaches and technologies. Some of these alternatives may be more cost effective or offer better performance than our products and we may not succeed in competing against these alternatives.

We currently rely on specific technologies and may not successfully adapt to the rapidly changing market environments.

We must overcome technical challenges to commercialize our Conductus wire. If we are able to do so, we will need to attain customer acceptance of our Conductus wire, and we cannot ensure that such acceptance will occur. We will have to continue to develop and integrate advances to our core technologies. We will also need to continue to develop and integrate advances in complementary technologies. We cannot guarantee that our development efforts will not be rendered obsolete by research efforts and technological advances made by others. Our business success depends upon our ability to keep pace with advancing technology, including materials, processes and industry standards.

We may experience significant fluctuations in sales and operating results from quarter to quarter.

Our quarterly results may fluctuate due to a number of factors, including:

- the lack of any contractual obligation by our customers to purchase their forecasted demand for our products;

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- variations in the timing, cancellation, or rescheduling of customer orders, shipments and government contracts; and
- high fixed expenses that may disproportionately impact operating expenses, especially during a quarter with a sales shortfall.

If our customers desire to purchase products in excess of the forecasted amounts or in a different product mix, there may not be enough inventory or manufacturing capacity to fill their orders. Customer backlog may not be converted in to commercial revenues.

Due to these and other factors, our past results have limited predictive value as to our Conductus wire initiative or government contract revenues. Future revenues and operating results may not meet the expectations of stock analysts and investors. In either case, the price of our common stock could be materially adversely affected.

Worldwide economic uncertainty may adversely affect our business, operating results and financial condition.

The United States and global economies continue to experience a period of economic and financial uncertainty, which could result in economic volatility having direct and indirect adverse effects on our business, operating results and financial condition in a number of ways. For example, current or potential customers may delay or decrease spending with us, may delay paying us for previously purchased products, or may not pay us at all. In addition, this recent downturn has had, and may continue to have, an unprecedented negative impact on the global credit markets. If we are required to obtain financing in the near term to meet our working capital or other business needs, we may not be able to obtain that financing. Further, even if we are able to obtain the financing we need, it may be on terms that are not favorable to us, with increased financing costs and restrictive covenants.

Our reliance on a limited number of suppliers and the long lead time of components for our products could impair our ability to manufacture and deliver our systems on a timely basis.

A number of components used in our products are available from a limited number of outside suppliers due to unique designs as well as certain quality and performance requirements. Our reliance on sole or limited source suppliers involves certain risks and uncertainties, many of which are beyond our control. These include the possibility of a shortage or the discontinuation of certain key components. Any reduced availability of these parts or components when required could impair our ability to manufacture and deliver our systems on a timely basis and result in the delay or cancellation of orders, which could harm our business.

In addition, the purchase of some of our key components involves long lead times and, in the event of unanticipated increases in demand for our solutions, we may be unable to obtain these components in sufficient quantities to meet our customers' requirements. We do not have guaranteed supply arrangements with any of these suppliers, do not maintain an extensive inventory of parts or components and customarily purchase sole or limited source parts and components pursuant to purchase orders. Business disruptions, quality issues, production shortfalls or financial difficulties of a sole or limited source supplier could materially and adversely affect us by increasing product costs, or eliminating or delaying the availability of such parts or components. In such events, our inability to develop alternative sources of supply quickly and on a cost-effective basis could impair our ability to manufacture and deliver our systems on a timely basis and could harm our business.

Our reliance on a limited number of suppliers exposes us to quality control issues.

Our reliance on certain single-source and limited-source components exposes us to quality control issues if these suppliers experience a failure in their production process or otherwise fail to meet our quality requirements.

A failure in single-source or limited-source components or products could force us to repair or replace a product utilizing replacement components. If we cannot obtain comparable replacements or effectively return or redesign our products, we could lose customer orders or incur additional costs, which could have a material adverse effect on our gross margins and results of operations.

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Our ability to protect our patents and other proprietary rights is uncertain, exposing us to possible losses of competitive advantage.

Our efforts to protect our proprietary rights may not succeed in preventing infringement by others or ensure that these rights will provide us with a competitive advantage. Pending patent applications may not result in issued patents and the validity of issued patents may be subject to challenge. Third parties may also be able to design around the patented aspects of the products. Additionally, certain of the issued patents and patent applications are owned jointly with third parties. Because any owner or co-owner of a patent can license its rights under jointly-owned patents or applications, inventions made by us jointly with others are not subject to our exclusive control. Any of these possible events could result in losses of competitive advantage.

We depend on specific patents and licenses to technologies, and we will likely need additional technologies in the future that we may not be able to obtain.

We utilize technologies under licenses of patents from others for our products. These patents may be subject to challenge, which may result in significant litigation expense (which may or may not be recoverable against future royalty obligations). Additionally, we continually try to develop new products, and, in the course of doing so, we may be required to utilize intellectual property rights owned by others and may seek licenses to do so. Such licenses may not be obtainable on commercially reasonable terms, or at all. It is also possible that we may inadvertently utilize intellectual property rights held by others, which could result in substantial claims.

Intellectual property infringement claims against us could materially harm results of operations.

Our products incorporate a number of technologies, including high-temperature superconductor technology, technology related to other materials, and electronics technologies. Our patent positions, and that of other companies using high-temperature superconductor technology, is uncertain and there is significant risk that others, including our competitors or potential competitors, have obtained or will obtain patents relating to our products or technologies or products or technologies planned to be introduced by us.

We believe that patents may be or have been issued, or applications may be pending, claiming various compositions of matter used in our products. We may need to secure one or more licenses of these patents. There can be no assurances that such licenses could be obtained on commercially reasonable terms, or at all. We may be required to expend significant resources to develop alternatives that would not infringe such patents or to obtain licenses to the related technology. We may not be able to successfully design around these patents or obtain licenses to them and may have to defend ourselves at substantial cost against allegations of infringement of third party patents or other rights to intellectual property. In those circumstances, we could face significant liabilities and also be forced to cease the use of key technology.

Other parties may have the right to utilize technology important to our business.

We utilize certain intellectual property rights under non-exclusive licenses or have granted to others the right to utilize certain intellectual property rights licensed from a third party. Because we may not have the exclusive rights to utilize such intellectual property, other parties may be able to compete with us, which may harm our business.

Because competition for target employees is intense, we may be subject to claims of unfair hiring practices, trade secret misappropriation or other related claims.

Companies in HTS wire industries whose employees accept positions with competitors frequently claim that competitors have engaged in unfair hiring practices, trade secret misappropriation or other related claims. We may be subject to such claims in the future as we seek to hire qualified personnel, and such claims may result in material litigation. If this should occur, we could incur substantial costs in defending against these claims, regardless of their merits.

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Our success depends on the attraction and retention of senior management and technical personnel with relevant expertise.

As a competitor in a highly technical market, we depend heavily upon the efforts of our existing senior management and technical teams. The loss of the services of one or more members of these teams could slow product development and commercialization objectives. Due to the specialized nature of our products, we also depend upon our ability to attract and retain qualified technical personnel with substantial industry knowledge and expertise. Competition for qualified personnel is intense, and we may not be able to continue to attract and retain qualified personnel necessary for the development of our business.

Regulatory changes could substantially harm our business.

Certain regulatory agencies in the United States and other countries set standards for operations within their territories. HTS wire is subject to a regulatory regime, which may become more strictly regulated if the market grows. Any failure or delay in obtaining necessary approvals could harm our business.

We may acquire or make investments in companies or technologies that could cause loss of value to stockholders and disruption of business.

We may explore opportunities to acquire companies or technologies in the future. Other than the acquisition of Conductus, Inc. in 2002, we have not made any such acquisitions or investments to date and, therefore, our ability as an organization to make acquisitions or investments is unproven. An acquisition entails many risks, any of which could adversely affect our business, including:

- failure to integrate operations, services and personnel;
- the price paid may exceed the value eventually realized;
- loss of share value to existing stockholders as a result of issuing equity securities to finance an acquisition;
- potential loss of key employees from either our then current business or any acquired business;
- entering into markets in which we have little or no prior experience;
- diversion of financial resources and management's attention from other business concerns;
- assumption of unanticipated liabilities related to the acquired assets; and
- the business or technologies acquired or invested in may have limited operating histories and may be subject to many of the same risks to which we are exposed.

In addition, future acquisitions may result in potentially dilutive issuances of equity securities, or the incurrence of debt, contingent liabilities or amortization expenses or charges related to goodwill or other intangible assets, any of which could harm our business. As a result, if we fail to properly evaluate and execute acquisitions or investments, our business and prospects may be seriously harmed.

If we are unable to implement appropriate controls and procedures to manage our potential growth, we may not be able to successfully offer our products and implement our business plan.

Our ability to successfully offer our products and implement our business plan in a rapidly evolving market requires an effective planning and management process. Growth in future operations would place a significant strain on management systems and resources. We expect that we would need to improve our financial and managerial controls, reporting systems and procedures, and would need to expand, train and manage our work force worldwide. Furthermore, we expect that we would be required to manage multiple relationships with various customers and other third parties.

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Compliance with environmental regulations could be especially costly due to the hazardous materials used in the manufacturing process. In addition, we could incur expenditures related to hazardous material accidents.

We are subject to a number of federal, state and local governmental regulations related to the use, storage, discharge and disposal of toxic, volatile or otherwise hazardous chemicals used in our business. Current or future laws and regulations could require substantial expenditures for preventative or remedial action, reduction of chemical exposure, waste treatment or disposal. Any failure to comply with present or future regulations could result in the imposition of fines, suspension of production or interruption of operations. In addition, these regulations could restrict our ability to expand or could require us to acquire costly equipment or incur other significant expense to comply with environmental regulations or to clean up prior discharges.

In addition, although we believe that our safety procedures for the handling and disposing of hazardous materials comply with the standards prescribed by state and federal regulations, there is always the risk of accidental contamination or injury from these materials. To date, we have not incurred substantial expenditures for preventive action with respect to hazardous materials or for remedial action with respect to any hazardous materials accident, but the use and disposal of hazardous materials involves risk that we could incur substantial expenditures for such preventive or remedial actions. If such an accident were to occur, we could be held liable for resulting damages. The liability in the event of an accident or the costs of such remedial actions could exceed our resources or otherwise have a material adverse effect on our financial condition, results of operations or cash flows.

The reliability of market data included in our public filings is uncertain.

Since we operate in a rapidly changing market, we have in the past, and may from time to time in the future, include market data from industry publications and our own internal estimates in some of the documents we file with the Securities and Exchange Commission. The reliability of this data cannot be assured. Industry publications generally state that the information contained in these publications has been obtained from sources believed to be reliable, but that its accuracy and completeness is not guaranteed. Although we believe that the market data used in our filings with the Securities and Exchange Commission is and will be reliable, it has not been independently verified. Similarly, internal company estimates, while believed by us to be reliable, have not been verified by any independent sources.

Risks Related to Our Common Stock

Our stock price is volatile.

The market price of our common stock has been, and is expected 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 and liquidity;
- progress or any lack of progress (or perceptions related to progress) in timely overcoming the remaining substantial technical and commercial challenges related to our Conductus 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.

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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.

If we fail to maintain the listing of our common stock with a U.S. national securities exchange, the liquidity of our common stock could be adversely affected.

Our ability to publicly or privately sell equity securities and the liquidity of our common stock could be adversely affected if we are delisted from the NASDAQ Capital Market or if we are unable to transfer our listing to another stock market.

Our common stock is listed for trading on the NASDAQ Capital Market. NASDAQ has adopted a number of continued listing standards that are applicable to our common stock, including a requirement that the bid price of our common stock be at least \$1.00 per share. Failure to maintain the minimum bid price can result in the delisting of our common stock from the NASDAQ Capital Market. We have previously fallen out of compliance with the minimum bid price requirement and have implemented reverse stock splits to regain compliance. Most recently, we effected a one-for-ten reverse stock split on July 24, 2018 for the purpose of regaining compliance with the minimum bid requirement following a notice from the Listing Qualifications Department of the Nasdaq Stock Market on May 22, 2018 and received a notice of re-compliance from the Listing Qualifications Department of the Nasdaq Stock Market on August 7, 2018. We currently have approximately 3,802,609 publicly held shares as of March 21, 2019. Because of NASDAQ's continued listing standard which requires that we maintain at least 500,000 publicly held shares, our ability to effectuate a reverse split in the future is limited to a reverse split ratio that would maintain compliance with such publicly held share requirement. This effective limit to a reverse split ratio could prevent us from remediating a minimum bid price violation under circumstances where our stock price was substantially below \$1.00 and a higher ratio was needed to remediate the noncompliance.

If our common stock is delisted by NASDAQ, our common stock may be eligible to trade on the OTC Bulletin Board, OTC QB or another over-the-counter market. Any such alternative would likely result in it being more difficult for us to raise additional capital through the public or private sale of equity securities and for investors to dispose of, or obtain accurate quotations as to the market value of, our common stock. In addition, there can be no assurance that our common stock would be eligible for trading on any such alternative exchange or markets.

We have a significant number of outstanding warrants and options, and future sales of the shares obtained upon exercise of these options or warrants could adversely affect the market price of our common stock.

As of December 31, 2018, we had outstanding options exercisable for an aggregate of 140,323 shares of common stock at a weighted average exercise price of \$25.29 per share and warrants to purchase up to 3,796,849 shares of our common stock at a weighted average exercise price of \$10.60 per share. The holders may sell these shares in the public markets from time to time under a registration statement or under Rule 144, without limitations on the timing, amount or method of sale. As our stock price rises, the holders may exercise their warrants and options and sell a large number of shares. This could cause the market price of our common stock to decline.

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

It is possible that the acquisition of a majority of our outstanding voting stock by another company could result in our stockholders receiving a premium over the public trading price for our shares. Provisions of our restated certificate of incorporation and our amended and restated bylaws, each as amended, and of Delaware

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corporate law could delay or make more difficult an acquisition of our company by merger, tender offer or proxy contest, even if it would create an immediate benefit to our stockholders. For example, our restated certificate of incorporation does not permit stockholders to act by written consent, and our bylaws generally require ninety 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 March 21, 2019, 1,370,710 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.

Furthermore, 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.

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.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

We lease all of our properties. All of our operations, including our manufacturing facilities, are currently located in an industrial complex in Austin, Texas comprising approximately 94,000 square feet. In December 2016, we renewed our Austin lease for an additional three year term and that lease now expires in April 2020. Our Austin lease contains a renewal option. Although we currently have excess capacity, we believe our facility can be managed in a flexible and cost effective manner and is adequate to meet current and reasonably anticipated needs for approximately the next two years.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we are party to various lawsuits, claims and other legal proceedings that arise in the ordinary course of our business. Excluding ordinary, routine litigation incidental to our business, we are not currently a party to any legal proceedings that we believe would reasonably be expected to have a material adverse effect on our business, financial condition or results of operation or cash flow.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market for Common Stock

Our common stock is traded on the NASDAQ Capital Market under the symbol “SCON.” The following table shows the high and low sales prices for our common stock as reported by NASDAQ for each calendar quarter in the last two fiscal years:

2018	High	Low
Quarter ended December 31, 2018	\$ 2.50	\$ 1.03
Quarter ended September 29, 2018	\$12.88	\$ 1.47
Quarter ended June 30, 2018	\$10.90	\$ 8.50
Quarter ended March 31, 2018	\$14.90	\$ 9.30
2017	High	Low
Quarter ended December 31, 2017	\$14.20	\$ 9.50
Quarter ended September 30, 2017	\$18.90	\$ 8.80
Quarter ended July 1, 2017	\$24.70	\$12.10
Quarter ended April 1, 2017	\$18.00	\$10.40

Holders of Record

We had 9 holders of record of our common stock on March 21, 2019. This number does not include stockholders for whom shares were held in a “nominee” or “street” name. We estimate that there are more than 5,000 beneficial owners of our common stock.

Dividends

We have never paid cash dividends and intend to employ all available funds in the development of our business. We have no plans to pay cash dividends in the near future.

Our ability to declare or pay dividends on shares of our common stock is subject to the requirement that we pay an equivalent dividend on each outstanding share of our Preferred Stock (on an as-converted basis).

Sales of Unregistered Securities

We did not conduct any offerings of equity securities during the fourth quarter of 2018 that were not registered under the Securities Act of 1933.

Repurchases of Equity Securities

None.

Securities Authorized for Issuance Under Equity Compensation Plans

Equity Compensation Plan Information

<u>Plan Category</u>	<u>Number of securities to be issued upon exercise of outstanding options, warrants and rights</u>	<u>Weighted-average exercise price of outstanding options, warrants and rights</u>	<u>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))</u>
Equity compensation plans approved by security holders	140,323	\$ 25.29	78,452
Equity compensation plans not approved by security holders	—	—	—
Total	140,323	\$ 25.29	78,452

ITEM 6. SELECTED FINANCIAL DATA

The information set forth below is not necessarily indicative of results of future operations and should be read in conjunction with our Financial Statements and Notes thereto appearing in Item 15 of Part IV of this Report and “Management’s Discussion and Analysis of Financial Condition and Results of Operations”.

	<u>Years Ended December 31,</u>				
	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
	(In thousands, except per share data)				
Statement of Operations Data:					
Net revenues:					
Net commercial product revenues	\$ —	\$ 11	\$ 131	\$ 244	\$ 632
Government and other contract revenues	1,556	435	—	—	—
Total net revenues	1,556	446	131	244	632
Costs and expenses:					
Cost of revenues	2,245	3,072	3,444	3,004	1,558
Cost of government and other contract revenues	1,210	331	—	—	—
Other research and development	2,352	2,644	2,784	4,125	5,992
Selling, general and administrative	3,972	4,062	5,146	5,838	5,389
Total costs and expenses	9,779	10,109	11,374	12,967	12,939
Loss from operations	(8,223)	(9,663)	(11,243)	(12,723)	(12,307)
Other income (expense), net	92	136	127	4,121	4,056
Net loss	<u>\$(8,131)</u>	<u>\$(9,527)</u>	<u>\$(11,116)</u>	<u>\$(8,602)</u>	<u>\$(8,251)</u>
Basic and diluted net loss per common share	<u>\$ (4.03)</u>	<u>\$ (9.06)</u>	<u>\$ (35.31)</u>	<u>\$ (65.97)</u>	<u>\$ (96.73)</u>
Weighted average number of shares Outstanding	<u>2,017</u>	<u>1,052</u>	<u>315</u>	<u>131</u>	<u>85</u>
	<u>Years Ended December 31,</u>				
	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Balance Sheet Data:					
Cash and cash equivalents	\$ 5,616	\$ 3,056	\$ 10,452	\$ 7,469	\$ 1,238
Working capital (deficit)	4,998	2,562	9,693	6,900	(407)
Total assets	7,614	5,996	15,214	14,365	10,799
Long-term debt, including current portion	17	54	172	400	5,624
Total stockholders’ equity	6,745	5,112	14,098	13,122	4,002

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ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Management's Discussion and Analysis of Financial Condition and Results of Operations includes many forward-looking statements. For cautions about relying on such forward looking statements, please refer to the section entitled "Forward Looking Statements" at the beginning of this Report immediately prior to Item 1.

General

We are a leading company in developing and commercializing high temperature superconductor ("HTS") materials and related technologies. HTS materials can substantially improve the performance characteristics of electrical systems, reducing power loss, lowering heat generation, and decreasing electrical noise.

Results of Operations

2018 Compared to 2017

Total revenues increased by \$1,110,000 or 249%, to \$1,556,000 in 2018 from \$446,000 in 2017. Government contract revenues were \$1,556,000 or 100% of total revenue, of our total revenue in 2018 and \$435,000 or 98% of total revenues in 2017. Sales of our Conductus wire are expected to increase as we reach commercial production of Conductus wire.

Cost of commercial product revenues includes all direct costs, manufacturing overhead, preproduction process development and provision for excess and obsolete inventories. The cost of commercial product revenues totaled \$2.2 million for 2018 compared to \$3.1 million in 2017. Cost of government product revenues totaled \$1.2 million for 2018 compared to \$0.3 million in 2017.

Our cost of commercial product revenues includes both variable and fixed cost components. The variable component consists primarily of materials, assembly and test labor, overhead, which includes equipment and facility depreciation, transportation costs and warranty costs. The fixed component includes test equipment and facility depreciation, purchasing and procurement expenses and quality assurance costs. Given the fixed nature of such costs, the absorption of our production overhead costs into inventory decreases and the amount of production overhead variances charged to cost of sales increases as production volumes decline since we have fewer units to absorb our overhead costs against. Conversely, the absorption of our production overhead costs into inventory increases and the amount of production overhead variances expensed to cost of sales decreases as production volumes increase since we have more units to absorb our overhead costs against. As a result, our gross profit margins generally decrease as revenue and production volumes decline due to lower sales volume and higher amounts of production overhead variances expensed to cost of sales; and our gross profit margins generally increase as our revenue and production volumes increase due to higher sales volume and lower amounts of production overhead variances expensed to cost of sales.

The following is an analysis of our product gross profit margins for 2018 and 2017:

<i>Dollars in Thousands</i>	Years Ended	
	2018	2017
Commercial product revenues	\$ —	\$ 11
Cost of commercial product revenues	2,245	3,072
Gross loss	<u>\$(2,245)</u>	<u>\$(3,061)</u>

We had a gross loss of \$2.2 million in 2018 from the sale of our commercial products compared to a gross loss of \$3.1 million in 2017. We experienced a gross loss in 2018 and 2017 due to: our increased manufacturing

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efforts to bring our Conductus wire production to market; our processes not yet being finalized for high yield manufacturing and; our sales being insufficient to cover our overhead. As we emphasize improving manufacturing processes and increasing our yields at lower than optimal capacity, we expect gross losses to continue in 2019.

In June 2017, we finalized negotiations on a \$4.5 million DOE contract and have begun work on this government contract. Our first year goals under this contract are to increase current carrying capacity and reduce costs of our Conductus wire. Our 2018 government contract revenues were \$1,556,000 and cost of government contract revenues, which include all direct contract costs and overhead, were \$1,210,000.

Research and development expenses relate to development of new wire products and new wire product manufacturing processes. In 2017, we ceased research and development efforts for our wireless commercial products. Research and development expenses totaled \$2.4 million in 2018 compared to \$2.6 million in 2017, a decrease of \$0.2 million, or 8%. Our 2018 expenses were lower compared to 2017 as a result of our efforts moving from research and development to manufacturing of our new Conductus wire products.

Selling, general and administrative expenses totaled \$4.0 million in 2018 compared to \$4.1 million in 2017, a decrease of \$0.1 million, or 3%. The lower expenses in 2018 were primarily the result of lower stock-based compensation expense.

We had a gain from the decreased fair value of warrant derivatives of \$52,000 in 2018 compared to a gain of \$99,000 in 2017. The primary reason for the gains was the drop in our stock price offset by the resulting effect of the reduction in the exercise price of certain warrants. This warrant liability is adjusted to fair value each reporting period, and any change in value is recognized in the statement of operations. In 2018, we also had a \$24,000 warrant price revaluation expense due to our March 2018 financing. There was no price revaluation in 2017. See Note 5 — Stockholders' Equity: *Warrants*.

Other income of \$64,000 and \$37,000 in 2018 and 2017, respectively, was interest income.

Net loss totaled \$8.1 million in 2018, compared to \$9.5 million in 2017, a decrease of \$1.4 million, or 15%. The decrease in net loss principally resulted from \$1.1 million higher 2018 government revenues and \$0.3 million lower expenses.

The net loss available to common stockholders totaled \$4.03 per common share in 2018, compared to a net loss of \$9.06 per common share in 2017, a decrease of \$5.03, or 56%. The decreased loss per common share in 2018 principally resulted from a greater number of common shares outstanding at December 31, 2018 compared to December 31, 2017.

2017 Compared to 2016

Our 2017 revenues consisted primarily of government contract revenues. Total revenues increased by \$315,000 or 241%, to \$446,000 in 2017 from \$131,000 in 2016. Government contract revenues were \$435,000 or 98%, of our total revenue in 2017 and \$0 in 2016. Product revenue for wire outside of our government contracts was \$11,000 or 2% of total revenue in 2017 compared to \$1,000 or 1% of total revenue in 2016. Sales of our Conductus wire are expected to increase as we reach commercial production of Conductus wire.

Cost of commercial product revenues includes all direct costs, manufacturing overhead, preproduction process development and provision for excess and obsolete inventories. The cost of commercial product revenues totaled \$3.1 million for 2017 compared to \$3.4 million in 2016.

Our cost of commercial product revenues includes both variable and fixed cost components. The variable component consists primarily of materials, assembly and test labor, overhead, which includes equipment and

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facility depreciation, transportation costs and warranty costs. The fixed component includes test equipment and facility depreciation, purchasing and procurement expenses and quality assurance costs. Given the fixed nature of such costs, the absorption of our production overhead costs into inventory decreases and the amount of production overhead variances charged to cost of sales increases as production volumes decline since we have fewer units to absorb our overhead costs against. Conversely, the absorption of our production overhead costs into inventory increases and the amount of production overhead variances expensed to cost of sales decreases as production volumes increase since we have more units to absorb our overhead costs against. As a result, our gross profit margins generally decrease as revenue and production volumes decline due to lower sales volume and higher amounts of production overhead variances expensed to cost of sales; and our gross profit margins generally increase as our revenue and production volumes increase due to higher sales volume and lower amounts of production overhead variances expensed to cost of sales.

The following is an analysis of our product gross profit margins for 2017 and 2016:

<i>Dollars in Thousands</i>	Years Ended December 31,			
	2017		2016	
Commercial product revenues	\$ 11	100%	\$ 131	100%
Cost of commercial product revenues	<u>3,072</u>	<u>2,792%</u>	<u>3,444</u>	<u>2,629%</u>
Gross loss	<u><u>\$ (3,061)</u></u>	<u><u>2,783%</u></u>	<u><u>\$ (3,313)</u></u>	<u><u>2,529%</u></u>

We had a gross loss of \$3.1 million in 2017 from the sale of our commercial products compared to a gross loss of \$3.3 million in 2016. We experienced a gross loss in 2017 and 2016 due to: our increased manufacturing efforts to bring our Conductus wire production to market; our processes not yet being finalized for high yield manufacturing and; our sales being insufficient to cover our overhead. As we emphasize improving manufacturing processes and increasing our yields at lower than optimal capacity, we expect gross losses to continue in the first half of 2018.

In June 2017, we finalized negotiations on a \$4.5 million DOE contract and have begun work on this government contract. Our first year goals under this contract are to increase current carrying capacity and reduce costs of our Conductus wire. Our 2017 government contract revenues were \$435,000 and cost of government contract revenues were \$331,000.

Research and development expenses relate to development of new wire products and new wire product manufacturing processes. In 2017, we ceased research and development efforts for our wireless commercial products. Research and development expenses totaled \$2.6 million in 2017 compared to \$2.8 million in 2016, a decrease of \$0.2 million, or 7%. Our 2017 expenses were lower compared to 2016 as a result of our efforts moving from research and development to manufacturing of our new Conductus wire products.

Selling, general and administrative expenses totaled \$4.1 million in 2017 compared to \$5.1 million in 2016, a decrease of \$1.0 million, or 20%. The lower expenses in 2017 were primarily the result of lower stock-based compensation expense.

We had a gain from the decreased fair value of warrant derivatives of \$0.1 million in 2017 compared to a gain of \$0.2 million in 2016. The primary reason for the gains was the drop in our stock price offset by the resulting effect of the reduction in the exercise price of certain warrants. This warrant liability is adjusted to fair value each reporting period, and any change in value is recognized in the statement of operations. In 2016, we also had a \$66,000 warrant price revaluation expense due to our August 2016 and December 2016 financing. There was no price revaluation in 2017. See Note 5 — Stockholders' Equity: *Warrants*.

Other income of \$37,000 and \$10,000 in 2017 and 2016, respectively, was interest income.

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Net loss totaled \$9.5 million in 2017, compared to \$11.1 million in 2016, a decrease of \$1.6 million, or 14%. The decrease in net loss principally resulted from \$1.0 million lower 2017 selling general and administrative expenses and \$0.4 million increased revenues from government contract work.

The net loss available to common stockholders totaled \$9.06 per common share in 2017, compared to a net loss of \$35.31 per common share in 2016, a decrease of \$26.25, or 74%. The decreased loss per common share in 2017 principally resulted from a greater number of common shares outstanding at December 31, 2017 compared to December 31, 2016.

Liquidity and Capital Resources

Cash Flow Analysis

As of December 31, 2018, we had net working capital of \$5.0 million, including \$5.6 million in cash and cash equivalents, compared to net working capital of \$2.6 million at December 31, 2017, which included \$3.1 million in cash and cash equivalents. We currently invest our excess cash in short-term, investment-grade, money-market instruments with maturities of three months or less. Our investments have no exposure to the auction rate securities market.

Cash and cash equivalents increased by \$2.5 million from \$3.1 million at December 31, 2017 to \$5.6 million at December 31, 2018. In 2018, \$6.9 million cash was used in operations, while \$9.7 million was provided by financing activities.

In 2018 and 2017, net cash used in investing activities was \$189,000 and \$152,000, respectively. Our 2018 and 2017 investing activities were for the purchase of property and equipment.

In 2018, net cash provided by two financing activities: (1) the March 2018 offering of our common stock, common stock equivalents and warrants provided gross proceeds of \$2.0 million and, after deducting the placement agent fees and our offering expenses, net proceeds of \$1.7 million; (2) the July 2018 offering of our common stock, Series E Convertible Preferred Stock and warrants provided gross proceeds of \$9.0 million and, after deducting the placement agent fees and our offering expenses, net proceeds of \$7.98 million.

In 2017, net cash provided by financing activities was \$200,000 from the exercise of outstanding warrants.

Net cash was provided by two financing activities in 2016: (1) the August 2016 offering of our common stock and Series C Convertible Preferred Stock and warrants provided gross proceeds of \$2.2 million and, after deducting the placement agent fees and our offering expenses, net proceeds of \$1.9 million; and (2) the December 2016, offering of our common stock and Series D Convertible Preferred Stock and warrants provided gross proceeds of \$10.3 million and, after deducting the placement agent fees and our offering expenses, net proceeds of \$9.2 million.

Financing Activities

We have historically financed our operations through a combination of cash on hand, equipment lease financings, available borrowings under bank lines of credit and both private and public equity offerings.

On July 30, 2018 we completed a public offering of an aggregate of 2,571,429 shares of our common stock (or common stock equivalents) and warrants to purchase an aggregate of 2,571,429 shares of common stock with gross proceeds to us of \$9.0 million. The net proceeds to us from the offering, after deducting the placement agent fees and our estimated offering expenses, was \$7.98 million.

On March 9, 2018, we completed a registered offering of common stock (and common stock equivalents) with total gross proceeds of approximately \$2 million. The net proceeds to us from the registered offering, after deducting the placement agent fees and our estimated offering expenses, was approximately \$1.7 million.

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In 2017, we had no private or public offerings.

During 2016 we completed the following financings: (1) the August 2016, offering of 29,360 shares of our common stock, 1,294.595255 shares of our Series C Convertible Preferred Stock and 53,506 warrants provided gross proceeds of \$2.2 million and, after deducting the placement agent fees and our offering expenses, net proceeds of \$1.9 million; and (2) the December 2016, offering of 179,878 shares of our common stock, 7,586.82 shares of our Series D Convertible Preferred Stock and 685,667 warrants provided gross proceeds of \$10.3 million and, after deducting the placement agent fees and our offering expenses, net proceeds of \$9.2 million.

We currently intend to use the net proceeds of these offerings 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.

Contractual Obligations and Commercial Commitments

We incur various contractual obligations and commercial commitments in our normal course of business. They consist of the following:

Operating Lease Obligations. Our operating lease obligations consist of facilities leases in Austin, Texas, as well as several smaller equipment leases.

Patents and Licenses. We have entered into a licensing agreement requiring royalty payments ranging from 0.5% to 1.0% of specified product sales. The agreement contains a provision for the payment of guaranteed or minimum royalty amounts. Typically, the licensor can terminate our license if we fail to pay minimum annual royalties.

Purchase Commitments. In the normal course of business, we incur purchase obligations with vendors and suppliers for the purchase of inventory, as well as other goods and services. These obligations are generally evidenced by purchase orders that contain the terms and conditions associated with the purchase arrangements. We are committed to accept delivery of such material pursuant to the purchase orders subject to various contract provisions that allow us to delay receipt of such orders or cancel orders beyond certain agreed upon lead times. Cancellations may result in cancellation costs payable by us.

Tabular Disclosure of Contractual Obligations. At December 31, 2018, we had the following contractual obligations and commercial commitments:

Contractual Obligations	Payments Due by Period				2024 and beyond
	Total	2019	2020 and 2021	2022 and 2023	
Operating leases	\$1,170,000	\$ 935,000	\$ 233,000	\$ 2,000	\$ —
Minimum license commitment	70,000	10,000	20,000	20,000	20,000
Fixed asset and inventory purchase commitments	60,000	60,000	—	—	—
Total contractual cash obligations	<u>\$1,300,000</u>	<u>\$1,005,000</u>	<u>\$ 253,000</u>	<u>\$ 22,000</u>	<u>\$20,000</u>

Capital Expenditures

We plan to invest in fixed assets during 2019 on an as-needed basis to enhance manufacturing our Conductus wire products. These expenditures are expected not to exceed \$1 million.

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Future Liquidity

In 2018, we incurred a net loss of \$8.1 million and had negative cash flows from operations of \$6.9 million. In 2017, we incurred a net loss of \$9.5 million and had negative cash flows from operations of \$7.4 million. Our cash resources may, therefore, not be sufficient to fund our business through the end of the current fiscal year. Therefore, unless we can materially grow our revenues from commercial operations during such period, we will need to raise additional capital during this fiscal year ending December 31, 2019 to continue to implement our current business plan and maintain our viability. Our independent registered public accounting firm has included in their audit reports for 2017 through 2018 an explanatory paragraph expressing substantial doubt about our ability to continue as a going concern.

At December 31, 2018 we had \$5.6 million in cash. We believe the key factors to our future liquidity will be our ability to successfully use our expertise and our technology to generate revenues in various ways, including commercial operations, joint ventures, and licenses and we plan to leverage our leadership in superconducting technologies, extensive intellectual property, and HTS manufacturing expertise to develop and produce our Conductus wire.

We forecast that our existing cash resources will be sufficient to fund our planned operations into the third quarter of 2019. Unless we materially grow our revenues from commercial opportunities during 2019, we will need to raise additional capital to continue to implement our current business plan and maintain our viability.

Net Operating Loss Carryforward

As of December 31, 2018, we had net operating loss carryforwards for federal and state income tax purposes of approximately \$345.9 million which expire in the years 2019 through 2037. Of these amounts, \$69.7 million resulted from the acquisition of Conductus. Under the Internal Revenue Code change of control limitations, a maximum of \$20.7 million will be available for reduction of future taxable income. The 2017 Tax Act did not impact our 2017 or 2018 operating results or income tax expense.

Due to the uncertainty surrounding their realization, we have recorded a full valuation allowance against our net deferred tax assets. Accordingly, no deferred tax asset has been recorded in the accompanying consolidated balance sheets.

Section 382 of the Internal Revenue Code imposes an annual limitation on the utilization of net operating loss carryforwards based on a statutory rate of return (usually the “applicable federal funds rate”, as defined in the Internal Revenue Code) and the value of the corporation at the time of a “change of ownership” as defined by Section 382. We had changes in ownership in August 1999, December 2002, June 2009, August 2013 and December 2016. In addition, we acquired the right to Conductus’ net operating losses, which are also subject to the limitations imposed by Section 382. Conductus underwent six ownership changes, for purpose of this rule, which occurred in February 1999, February 2001, December 2002, June 2009, August 2013, and December 2016. Therefore, the ability to utilize Conductus’ and our net operating loss carryforwards of \$327.7 million which were incurred prior to the 2016 ownership changes, will be subject in future periods to annual limitations of \$126,000. Net operating losses released from this limitation and/or incurred by us subsequent to the ownership changes and therefore not subject to this limitation totaled \$18.2 million. An additional \$126,000 in losses were released from limitation during the year under Section 382.

Market Risk

We are exposed to various market risks, including changes in interest rates. Market risk is the potential loss arising from adverse changes in market rates and prices. We do not enter into derivatives or other financial instruments for trading or speculation purposes. Our money market investments have no exposure to the auction rate securities market.

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At December 31, 2018, we had approximately \$5 million invested in a money market account yielding approximately 0.5%. Assuming no yield on this money market account and no liquidation of principal for the year, our total interest income would decrease by less than \$25,000 per annum.

Inflation

We do not foresee any material impact on our operations from inflation.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We continually evaluate our estimates, including those related to bad debts, inventories, recovery of long-lived assets, income taxes, warranty obligations, contract revenue and contingencies. We base our estimates on historical experience and on various other assumptions that we believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Any future changes to these estimates and assumptions could cause a material change to our reported amounts of revenues, expenses, assets and liabilities. Actual results may differ from these estimates under different assumptions or conditions.

On July 24, 2018, we effected a 1-for-10 reverse stock split of our common stock, or the Second Reverse Stock Split. As a result of the Second Reverse Stock Split, every ten shares of our pre-Second Reverse Stock Split common stock were combined and reclassified into one share of our common stock. The Second Reverse Stock Split did not change the authorized number of shares or the par value of our common stock.

On July 19, 2016, we effected a 1-for-15 reverse stock split of our common stock, or the Reverse Stock Split. As a result of the Reverse Stock Split, every fifteen shares of our pre-Reverse Stock Split common stock were combined and reclassified into one share of our common stock. The Reverse Stock Split did not change the authorized number of shares or the par value of our common stock.

Share and per share data included in this Item 7 have been retroactively adjusted, as applicable, for the effect of the reverse stock splits. Certain of the information contained in the documents incorporated by reference herein and therein present information on our common stock on a pre-reverse stock split basis.

We identified certain critical accounting policies which affect certain of our more significant estimates and assumptions used in preparing our consolidated financial statements in this Annual Report on Form 10-K for 2018. We have not made any material changes to these policies.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of the consolidated financial statements. We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. We write down our inventory for estimated obsolescence or unmarketable inventory equal to the difference between the cost of inventory and the estimated net realizable value based upon assumptions about future demand and market conditions. If actual market conditions are less favorable than those projected by management, additional inventory write-downs may be required.

Our inventory is valued at the lower of its actual cost or net realizable value of the inventory. We review inventory quantities on hand and on order and record, on a quarterly basis, a provision for excess and obsolete

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inventory and/or vendor cancellation charges related to purchase commitments. If the results of the review determine that a write-down is necessary, we recognize a loss in the period in which the loss is identified, whether or not the inventory is retained. Our inventory reserves establish a new cost basis for inventory and are not reversed until we sell or dispose of the related inventory. Such provisions are established based on historical usage, adjusted for known changes in demands for such products, or the estimated forecast of product demand and production requirements. We recognize all manufacturing preproduction process development expenses as cost of revenues in the period they are incurred. Our business is characterized by rapid technological change, frequent new product development and rapid product obsolescence that could result in an increase in the amount of obsolete inventory quantities on hand. Demand for our products can fluctuate significantly. Our estimates of future product demand may prove to be inaccurate, and we may understate or overstate the provision required for excess and obsolete inventory.

Commercial product revenues consist of revenue from sales of products, net of trade discounts and allowances. We recognize revenue when evidence of an arrangement exists, contractual obligations have been satisfied, title and risk of loss have been transferred to the customer and collection of the resulting receivable is reasonably assured. At the time revenue is recognized, we provide for the estimated cost of product warranties if allowed for under contractual arrangements and return products. Our warranty obligation is affected by product failure rates and service delivery costs incurred in correcting a product failure. Should such failure rates or costs differ from these estimates, accrued warranty costs would be adjusted.

We indemnify, without limit or term, our customers against all claims, suits, demands, damages, liabilities, expenses, judgments, settlements and penalties arising from actual or alleged infringement or misappropriation of any intellectual property relating to our products or other claims arising from our products. We have no known losses and we cannot reasonably develop an estimate of the maximum potential amount of payments that might be made under our indemnities because of the uncertainty as to whether a claim might arise and how much it might total.

Government contract revenues are principally generated under research and development contracts. Contract revenues are derived primarily from research contracts with agencies of the United States Government. Credit risk related to accounts receivable arising from such contracts is considered minimal. These contracts may include cost-plus, fixed price and cost sharing arrangements and are generally short-term in nature.

All payments to us for work performed on contracts with agencies of the U.S. Government are subject to adjustment upon audit by the Defense Contract Audit Agency. Based on historical experience and review of current projects in process, we believe that the audits will not have a significant effect on our financial position, results of operations or cash flows. The Defense Contract Audit Agency has audited us through 2017.

We periodically evaluate the realizability of long-lived assets as events or circumstances indicate a possible inability to recover the carrying amount. Long-lived assets that will no longer be used in our business are written off in the period identified since they will no longer generate any positive cash flows for us. Such evaluation is based on various analyses, including cash flow and profitability projections, as well as alternative uses, such as government contracts or awards. The analyses necessarily involve significant management judgment. In the event the projected undiscounted cash flows are less than net book value of the assets, the carrying value of the assets will be written down to their estimated fair value. Our future cash flows may vary from estimates.

The fair value of our warrant liabilities was determined using the binomial lattice valuation model, including an equal probabilities tree and an early exercise factor. These derivative liabilities were adjusted to reflect fair value at each period end, with any increase or decrease in the fair value recognized in our consolidated statement of operations. These warrants expired on August 9, 2018 and had no value at December 31, 2018.

Stock-based employee compensation cost is recognized using the fair-value based method for all awards granted. We issue stock option awards and restricted share awards to employees and to non-employee directors

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under our stock-based incentive plans. The fair value of each option grant is estimated on the date of grant using the Black-Scholes option pricing model. Compensation cost related to restricted share awards is recorded based on the market price of our common stock on the grant date. We recognize compensation expense over the expected service period, generally the vesting period on a straight-line basis from the grant date.

Our valuation allowance against the deferred tax assets is based on our assessments of historical losses and projected operating results in future periods. If and when we generate future taxable income in the U.S. against which these tax assets may be applied, some portion or all of the valuation allowance would be reversed and an increase in net income would consequently be reported in future years.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

See “*Management’s Discussion and Analysis of Financial Condition and Results of Operations — Market Risk.*”

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

All information required by this item is listed in the Index to Financial Statements in Part IV, Item 15(a)1 of this Report.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures; Changes in Internal Control Over Financial Reporting

We have established disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended). As of the end of the period covered by this report we carried out an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15 of the Securities and Exchange Act of 1934, as amended. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded, as of that time, that our disclosure controls and procedures are effective.

There were no changes in our internal controls over financial reporting during the fourth quarter of the year ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

We do not expect that our disclosure controls and procedures or our internal controls will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected.

Management’s Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended). Our

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management assessed the effectiveness of our internal controls over financial reporting as of December 31, 2018. In making its assessment of the effectiveness of our internal controls over financial reporting, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework (2013). Based on these criteria, our management has concluded that, as of December 31, 2018, our internal control over financial reporting is effective.

This Report does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. This Report was not subject to attestation by our registered public accounting firm pursuant to the rules of the Securities and Exchange Commission.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is incorporated by reference to our Proxy Statement for the 2019 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days after the end of our year ended December 31, 2018.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference to our Proxy Statement for the 2019 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days after the end of our year ended December 31, 2018.

ITEM 12. SECURITIES OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is incorporated by reference to our Proxy Statement for the 2019 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days after the end of our year ended December 31, 2018.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

None.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is incorporated by reference to our Proxy Statement for the 2019 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days after the end of our year ended December 31, 2018.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this Report:

1. Index to Financial Statements. Our consolidated financial statements and the Report of Marcum LLP, Independent Registered Public Accounting Firm are included in Part IV of this Report on the pages indicated:

	<u>Page</u>
Report of Independent Registered Public Accounting Firm	F-1
Consolidated Balance Sheets as of December 31, 2018 and 2017	F-2
Consolidated Statements of Operations for the years ended December 31, 2018, 2017 and 2016	F-3
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2018, 2017 and 2016	F-4
Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2016	F-5
Notes to Consolidated Financial Statements	F-6

2. Financial Statement Schedule Covered by the Foregoing Report of Independent Registered Public Accounting Firm.

Schedule II— Valuation and Qualifying Accounts	F-26
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All other schedules are omitted because they are not applicable or the required information is shown in the financial statements or the notes thereto.

3. Exhibits

<u>Number</u>	<u>Description of Document</u>
3.1	Restated Certificate of Incorporation of Registrant as amended through March 1, 2006. (14)
3.2	Certificate of Amendment of Restated Certificate of Incorporation of Registrant, filed March 11, 2013. (18)
3.3	Certificate of Amendment of Restated Certificate of Incorporation of Registrant, filed July 18, 2016. (25)
3.4	Certificate of Amendment of Restated Certificate of Incorporation of Registrant, filed July 19, 2018, effective July 24, 2018. (29)
3.4	Amended and Restated Bylaws of Registrant. (14)
3.5	Amendment adopted March 29, 2010 to Amended and Restated Bylaws of Registrant. (15)
3.6	Amendment adopted October 28, 2013 to Amended and Restated Bylaws of Registrant. (19)
4.1	Form of Common Stock Certificate. (13)
4.2	Form of Series B Preferred Stock Certificate. (24)
4.3	Form of Series C Preferred Stock Certificate. (26)
4.4	Form of Series D Preferred Stock Certificate. (27)
4.5	Form of Series E Preferred Stock Certificate. (28)
4.6	Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock of Registrant filed November 13, 2007. (12)

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<u>Number</u>	<u>Description of Document</u>
4.7	<u>Certificate of Designation of Preferences, Rights and Limitations of Series B Convertible Preferred Stock of Registrant and form of Series B Convertible Preferred Stock Certificate. (24)</u>
4.8	<u>Certificate of Designation of Preferences, Rights and Limitations of Series C Convertible Preferred Stock of Registrant and form of Series C Convertible Preferred Stock Certificate. (26)</u>
4.9	<u>Certificate of Designation of Preferences, Rights and Limitations of Series D Convertible Preferred Stock of Registrant and form of Series D Convertible Preferred Stock Certificate. (27)</u>
4.10	<u>Certificate of Designation of Preferences, Rights and Limitations of Series E Convertible Preferred Stock of Registrant. (29)</u>
4.11	<u>Form of Warrant to Purchase Common Stock issued by Registrant on March 25, 2015, pursuant to the Purchase Agreement. (21)</u>
4.12	<u>Form of Placement Agent Warrant to Purchase Common Stock issued by Registrant on March 25, 2015. (21)</u>
4.13	<u>Form of Series [A][B] Common Stock Purchase Warrant issued by Registrant on October 14, 2015. (22)</u>
4.14	<u>Form of Placement Agent Warrant to Purchase Common Stock issued by Registrant on October 14, 2015. (22)</u>
4.15	<u>Form of Warrant to Purchase Common Stock issued by Registrant on August 2, 2016. (26)</u>
4.16	<u>Form of Placement Agent Warrant to Purchase Common Stock issued by Registrant on August 2, 2016. (26)</u>
4.17	<u>Form of Warrant to Purchase Common Stock issued by Registrant on December 14, 2016. (27)</u>
4.18	<u>Form of Pre-Funded Common Stock Purchase Warrant issued by Registrant on March 9, 2018. (28)</u>
4.19	<u>Form of Placement Agent Common Stock Purchase Warrant issued by Registrant on March 9, 2018. (28)</u>
4.20	<u>Form of Series A Common Stock Purchase Warrant issued by Registrant on March 9, 2018. (28)</u>
4.21	<u>Registration Rights Agreement dated March 6, 2018. (28)</u>
4.22	<u>Form of Common Stock Purchase Warrant issued by Registrant on July 30, 2018. (29)</u>
4.23	<u>Form of Placement Agent Common Stock Purchase Warrant issued by Registrant on July 30, 2018. (29)</u>
10.1	<u>Form of Change in Control Agreement dated March 28, 2003. (1)***</u>
10.2	<u>Form of Amendment No. 1 to Change in Control Agreement dated as of May 24, 2005. (7)***</u>
10.3	<u>Form of Amendment No. 2 to Change in Control Agreement dated as of December 31, 2006. (9)***</u>
10.4	<u>Patent License Agreement by and between Registrant and Lucent Technologies GRL LLC. (2)**</u>
10.5	<u>License Agreement between Registrant and Sunpower dated May 2, 2005. (3)**</u>
10.6	<u>Employment Agreement between Registrant and Jeffrey Quiram dated as of February 14, 2005. (4)***</u>
10.7	<u>Amendment to Employment Agreement between Registrant and Jeffrey Quiram dated as of December 31, 2006. (9)***</u>
10.8	<u>2003 Equity Incentive Plan As Amended May 25, 2005. (6)***</u>
10.9	<u>Form of Notice of Grant of Stock Options and Option Agreement for 2003 Equity Incentive Plan. (4)***</u>

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<u>Number</u>	<u>Description of Document</u>
10.10	<u>Management Incentive Plan (July 24, 2006). (8)***</u>
10.11	<u>Compensation Policy for Non-Employee Directors dated March 18, 2005. (5)***</u>
10.12	<u>Form of Director and Officer Indemnification Agreement. (20)***</u>
10.13	<u>Lease Agreement between the Registrant and Prologis Texas III LLC dated December 5, 2011. (16)</u>
10.14	<u>First Amendment to Lease Agreement between the Registrant and Prologis Texas III LLC dated August 23, 2012. (17)</u>
10.15	<u>Second Amendment to Lease Agreement between Registrant and Prologis Texas III LLC dated July 18, 2014. (20)</u>
10.16	<u>Agreement between Registrant and Hunchun BaoLi Communication Co., Ltd. (“BAOLI”) dated August 17, 2007. (10)</u>
10.17	<u>First Amendment to Agreement between Registrant and BAOLI dated November 1, 2007. (11)</u>
10.18	<u>Second Amendment to Agreement between Registrant and BAOLI dated January 7, 2008. (11)</u>
10.19	<u>2013 Equity Incentive Plan adopted October 25, 2013, and forms of Award Agreements. (23) ***</u>
14	<u>Code of Business Conduct and Ethics. (7)</u>
21	<u>List of Subsidiaries. (30)</u>
23.1	<u>Consent of Marcum, LLP, Independent Registered Public Accounting Firm. (30)</u>
31.1	<u>Statement of CEO Pursuant to 302 of the Sarbanes-Oxley Act of 2002. (30)</u>
31.2	<u>Statement of CFO Pursuant to 302 of the Sarbanes-Oxley Act of 2002. (30)</u>
32.1	<u>Statement of CEO Pursuant to 906 of the Sarbanes-Oxley Act of 2002. (30) *</u>
32.2	<u>Statement of CFO Pursuant to 906 of the Sarbanes-Oxley Act of 2002. (30) *</u>
101	Financials provided in XBRL format. (38)

- (1) Incorporated by reference from Registrant’s Quarterly Report on Form 10-Q for the quarter ended March 29, 2003, filed May 13, 2003.
- (2) Incorporated by reference from Registrant’s Annual Report on Form 10-K for the year ended December 31, 2003, filed March 11, 2004.
- (3) Incorporated by reference from Registrant’s Quarterly Report on Form 10-Q for the quarter ended October 2, 2004, filed November 10, 2004.
- (4) Incorporated by reference from Registrant’s Annual Report on Form 10-K for the year ended December 31, 2004, filed March 16, 2005.
- (5) Incorporated by reference from Registrant’s Quarterly Report on Form 10-Q for the quarter ended April 2, 2005, filed May 6, 2005.
- (6) Incorporated by reference from Registrant’s Current Report on Form 8-K filed May 27, 2005.
- (7) Incorporated by reference from Registrant’s Annual Report on Form 10-K for the year ended December 31, 2005, filed March 8, 2006.
- (8) Incorporated by reference from Registrant’s Current Report on Form 8-K filed July 28, 2006.
- (9) Incorporated by reference from Registrant’s Annual Report on Form 10-K for the year ended December 31, 2006, filed April 2, 2007.
- (10) Incorporated by reference from Registrant’s Quarterly Report on Form 10-Q for the quarter ended September 29, 2007, filed November 13, 2007.
- (11) Incorporated by reference from Registrant’s Annual Report on Form 10-K for the year ended December 31, 2007, filed March 27, 2008.
- (12) Incorporated by reference from Registrant’s Current Report on Form 8-K/A filed February 25, 2008.

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- (13) Incorporated by reference from Registrant's Form 10-K filed March 28, 2014.
 - (14) Incorporated by reference from Registrant's Annual Report on Form 10-K for the year ended December 31, 2009, filed March 17, 2010.
 - (15) Incorporated by reference from Registrant's Current Report on Form 8-K filed April 2, 2010.
 - (16) Incorporated by reference from Registrant's Annual Report on Form 10-K for the year ended December 31, 2011, filed March 30, 2012.
 - (17) Incorporated by reference from Registrant's Quarterly Report on Form 10-Q for the quarter ended September 29, 2012, filed November 13, 2012.
 - (18) Incorporated by reference from Registrant's Current Report on Form 8-K filed March 14, 2013.
 - (19) Incorporated by reference from Registrant's Current Report on Form 8-K filed October 31, 2013.
 - (20) Incorporated by reference from Registrant's Annual Report on Form 10-K for the year ended December 31, 2014, filed March 12, 2015.
 - (21) Incorporated by reference from Registrant's Current Report on Form 8-K filed March 24, 2015.
 - (22) Incorporated by reference from Registrant's Form S-1/A filed October 6, 2015.
 - (23) Incorporated by reference as Exhibit A to Registrant's Schedule 14A filed October 31, 2013.
 - (24) Incorporated by reference from Registrant's Current Report on Form 8-K filed October 13, 2015.
 - (25) Incorporated by reference from Registrant's Current Report on Form 8-K filed July 18, 2016.
 - (26) Incorporated by reference from Registrant's Current Report on Form 8-K filed August 2, 2016.
 - (27) Incorporated by reference from Registrant's Form S-1/A filed December 6, 2016.
 - (28) Incorporated by reference from Registrant's Current Report on Form 8-K filed March 9, 2018.
 - (29) Incorporated by reference from Registrant's Amendment No. 1 to Registration Statement on Form S-1, filed July 24, 2018.
 - (30) Filed herewith.
- * Furnished, not filed.
 - ** Confidential treatment has been previously granted for certain portions of these exhibits.
 - *** This exhibit is a management contract or compensatory plan or arrangement.
- (b) Exhibits. See Item 15(a) above.

ITEM 16. FORM 10-K SUMMARY

None.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of

Superconductor Technologies Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Superconductor Technologies Inc. (the “Company”) as of December 31, 2018 and 2017, the related consolidated statements of operations, stockholders’ equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and Schedule II — valuation and qualifying accounts (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

Explanatory Paragraph — Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As more fully described in Note 2, the Company has a significant working capital deficiency, has incurred significant losses and needs to raise additional funds to meet its obligations and sustain its operations. These conditions raise substantial doubt about the Company’s ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“PCAOB”) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Marcum LLP

Marcum LLP

We have served as the Company’s auditor since 2009.

Los Angeles, CA

March 29, 2019

**SUPERCONDUCTOR TECHNOLOGIES INC.
CONSOLIDATED BALANCE SHEETS**

	December 31, 2018	December 31, 2017
ASSETS		
Current Assets:		
Cash and cash equivalents	\$ 5,616,000	\$ 3,056,000
Accounts receivable, net	—	151,000
Inventory, net	173,000	102,000
Prepaid expenses and other current assets	<u>61,000</u>	<u>83,000</u>
Total Current Assets	5,850,000	3,392,000
Property and equipment, net of accumulated depreciation of \$12,172,000 and \$11,200,000, respectively	1,009,000	1,793,000
Patents, licenses and purchased technology, net of accumulated amortization of \$1,026,000 and \$984,000, respectively	686,000	742,000
Other assets	<u>69,000</u>	<u>69,000</u>
Total Assets	<u>\$ 7,614,000</u>	<u>\$ 5,996,000</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	\$ 313,000	\$ 349,000
Accrued expenses	<u>539,000</u>	<u>481,000</u>
Total Current Liabilities	852,000	830,000
Other long term liabilities	<u>17,000</u>	<u>54,000</u>
Total Liabilities	<u>869,000</u>	<u>884,000</u>
Commitments and contingencies (Notes 7 and 8)		
Stockholders' Equity:		
Preferred stock, \$.001 par value, 2,000,000 shares authorized, 330,787 and 328,925 issued and outstanding, respectively	—	—
Common stock, \$.001 par value, 250,000,000 shares authorized, 3,270,609 and 1,074,659 shares issued and outstanding, respectively	3,000	11,000
Capital in excess of par value	326,486,000	316,714,000
Accumulated deficit	<u>(319,744,000)</u>	<u>(311,613,000)</u>
Total Stockholders' Equity	<u>6,745,000</u>	<u>5,112,000</u>
Total Liabilities and Stockholders' Equity	<u>\$ 7,614,000</u>	<u>\$ 5,996,000</u>

See accompanying notes to the consolidated financial statements.

SUPERCONDUCTOR TECHNOLOGIES INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31		
	2018	2017	2016
Commercial product revenues	\$ —	\$ 11,000	\$ 131,000
Government contract revenues	1,556,000	435,000	—
Total revenues	<u>1,556,000</u>	<u>446,000</u>	<u>131,000</u>
Costs and expenses:			
Cost of commercial product revenues	2,245,000	3,072,000	3,444,000
Cost of government contract revenues	1,210,000	331,000	—
Research and development	2,352,000	2,644,000	2,784,000
Selling, general and administrative	3,972,000	4,062,000	5,146,000
Total costs and expenses	<u>9,779,000</u>	<u>10,109,000</u>	<u>11,374,000</u>
Loss from operations	(8,223,000)	(9,663,000)	(11,243,000)
Other Income and Expense			
Adjustments to fair value of warrant derivatives	52,000	99,000	183,000
Adjustment to warrant exercise price	(24,000)	—	(66,000)
Other income	64,000	37,000	10,000
Net loss	<u>\$(8,131,000)</u>	<u>\$(9,527,000)</u>	<u>\$(11,116,000)</u>
Basic and diluted net loss per common share	<u>\$ (4.03)</u>	<u>\$ (9.06)</u>	<u>\$ (35.31)</u>
Basic and diluted weighted average number of common shares outstanding	<u>2,016,869</u>	<u>1,052,473</u>	<u>314,838</u>

See accompanying notes to the consolidated financial statements.

**SUPERCONDUCTOR TECHNOLOGIES INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**

	Convertible Preferred Stock		Common Stock		Capital in Excess of Par Value	Accumulated Deficit	Total
	Shares	Amount	Shares	Amount			
Balance at December 31, 2015	330,873	\$ —	264,055	\$ 1,000	\$304,091,000	\$(290,970,000)	\$ 13,122,000
Issuance of common stock (net of costs)			209,239		3,222,000		3,222,000
Issuance of Series C preferred stock	1,295	—			1,118,000		1,118,000
Issuance of Series D preferred stock	7,587	—			6,748,000		6,748,000
Stock-based compensation					1,004,000		1,004,000
Cancellation of shares from reverse stock split			(4)				
Conversion of Series C preferred stock to common stock	(1,295)	—	41,981				
Conversion of Series B preferred stock to common stock	(1,948)	—	37,100				
Conversion of Series D preferred stock to common stock	(2,745)	—	183,000				
Net loss						(11,116,000)	(11,116,000)
Balance at December 31, 2016	333,767	—	735,371	1,000	316,183,000	(302,086,000)	14,098,000
Conversion of Series D preferred stock to common stock	(4,842)	—	322,788				
Issuance of common stock (net of costs) from exercise of outstanding warrants			13,333		200,000		200,000
Stock-based compensation			3,167		341,000		341,000
Net loss						(9,527,000)	(9,527,000)
Balance at December 31, 2017	328,925	—	1,074,659	1,000	316,724,000	(311,613,000)	5,112,000
Issuance of Series E preferred stock	4,135						
Conversion of Series E preferred stock to common stock	(2,273)		649,429				
Issuance of common stock (net of costs)			1,509,000	2,000	9,678,000		9,680,000
Stock-based compensation					84,000		84,000
Warrant Exercises			38,720				
Cancellation of shares from reverse stock split			(1,199)				
Net Loss						(8,131,000)	(8,131,000)
Balance at December 31, 2018	<u>330,787</u>	<u>\$ —</u>	<u>3,270,609</u>	<u>\$ 3,000</u>	<u>\$326,486,000</u>	<u>\$(319,744,000)</u>	<u>\$ 6,745,000</u>

See accompanying notes to the consolidated financial statements.

SUPERCONDUCTOR TECHNOLOGIES INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2018	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	\$(8,131,000)	\$ (9,527,000)	\$(11,116,000)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,015,000	1,885,000	2,139,000
Stock-based compensation expense	84,000	341,000	1,004,000
Adjustments to fair value of warrant derivatives	(52,000)	(99,000)	(183,000)
Adjustments to warrant exercise price	24,000	—	66,000
Changes in assets and liabilities:			
Accounts receivable	151,000	(143,000)	28,000
Inventory	(70,000)	(34,000)	52,000
Prepaid expenses and other current assets	22,000	26,000	12,000
Patents and licenses	14,000	212,000	(130,000)
Other assets	—	27,000	32,000
Accounts payable, accrued expenses and other liabilities	12,000	(132,000)	(9,000)
Net cash used in operating activities	<u>(6,931,000)</u>	<u>(7,444,000)</u>	<u>(8,105,000)</u>
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchase of property and equipment	<u>(189,000)</u>	<u>(152,000)</u>	<u>—</u>
Net cash used in investing activities	<u>(189,000)</u>	<u>(152,000)</u>	<u>—</u>
CASH FLOWS FROM FINANCING ACTIVITIES:			
Net proceeds from sale of common and preferred stock	9,680,000	—	11,088,000
Net proceeds from exercise of warrants	<u>—</u>	<u>200,000</u>	<u>—</u>
Net cash provided by financing activities	<u>9,680,000</u>	<u>200,000</u>	<u>11,088,000</u>
Net increase (decrease) in cash and cash equivalents	2,560,000	(7,396,000)	2,983,000
Cash and cash equivalents at beginning of year	<u>3,056,000</u>	<u>10,452,000</u>	<u>7,469,000</u>
Cash and cash equivalents at end of year	<u>\$ 5,616,000</u>	<u>\$ 3,056,000</u>	<u>\$ 10,452,000</u>

See accompanying notes to the consolidated financial statements.

SUPERCONDUCTOR TECHNOLOGIES INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 — The Company

Superconductor Technologies Inc. (together with our subsidiaries, “we” or “us”) was incorporated in Delaware on May 11, 1987. We develop and produce high temperature superconducting (HTS) materials and associated technologies. We have generated more than 100 patents as well as proprietary trade secrets and manufacturing expertise. We are now leveraging our key enabling technologies in HTS materials and cryogenics, to pursue emerging opportunities in the electrical grid and in equipment platforms that utilize electrical circuits. In January 2012, we took possession of a facility in Austin, Texas and have moved our HTS wire processes and our research and development to Austin.

Our initial superconducting products were completed in 1998, and we began delivery to a number of wireless network providers. In the following 13 years, our cost reducing efforts led to the invention of our proprietary, high-yield and high throughput HTS material deposition manufacturing process.

Since 2010 we have focused our research and development efforts on adapting our successful HTS materials deposition techniques to the production of our HTS Conductus® wire for next generation power applications. While most of our current commercial product revenues come from the sale of high performance wireless communications infrastructure products, production of our Conductus wire is our principal opportunity to grow our future revenue.

Historically, we used research and development contracts as a source of funds for our commercial technology development. Although we are not currently involved as either a contractor or subcontractor on contracts with the U.S. government, in November 2016, we were selected as the prime recipient of a \$4.5 million program award provided by the U.S. Department of Energy and, in June 2017, the related contract was finalized and we have now commenced work under that contract.

Note 2 — Summary of Significant Accounting Policies

Basis of Presentation

We have incurred significant net losses since our inception and have an accumulated deficit of \$319.7 million. In 2018, we incurred a net loss of \$8.1 million and had negative cash flows from operations of \$6.9 million. In 2017, we had an accumulated deficit of \$311.6 million, a net loss of \$9.5 million and negative cash flows from operations of \$7.4 million. At December 31, 2018, we had \$5.6 million in cash. Our current forecast is that our existing cash resources will be sufficient to fund our planned operations into the third quarter of 2019. Our cash resources may therefore not be sufficient to fund our business through the end of the current fiscal year. Therefore, unless we can materially grow our revenues from commercial operations during such period, we will need to raise additional capital during this fiscal year ending December 31, 2019 to continue to implement our current business plan and maintain our viability. Additional financing may not be available on acceptable terms or at all. If we issue additional equity securities to raise funds, the ownership percentage of our existing stockholders would be reduced. New investors may demand rights, preferences or privileges senior to those of existing holders of common stock. If we cannot raise any needed funds, we might be forced to make further substantial reductions in our operating expenses, which could adversely affect our ability to implement our current business plan and ultimately our viability as a company. These factors raise substantial doubt about our ability to continue as a going concern.

Our plans regarding improving our future liquidity will require us to successfully use our expertise and our technology to generate revenues in various ways, including commercial operations, joint ventures and licenses. We have invested and will continue to invest significant capital in our Austin, Texas manufacturing facility to enable us to produce our Conductus wire products. However, delays in the timing of our ability to, including but

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not limited to, raise additional capital, unexpected production delays, and our ability to sell our Conductus wire products in large scale could substantially impact our estimates used in the determination of expected future cash flows and/or expected future profitability. The accompanying consolidated financial statements do not include any adjustments that may result from the outcome of the uncertainties set forth above.

In 2018, we undertook steps to reduce our ongoing operating costs and we raised net cash proceeds of \$9.7 million from the sale of our common and preferred shares and warrants.

On July 24, 2018, we effected a 1-for-10 reverse stock split of our common stock, or the Second Reverse Stock Split. As a result of the Second Reverse Stock Split, every ten shares of our pre-Second Reverse Stock Split common stock were combined and reclassified into one share of our common stock. The Second Reverse Stock Split did not change the authorized number of shares or the par value of our common stock.

On July 19, 2016, we effected a 1-for-15 reverse stock split of our common stock, or the Reverse Stock Split. As a result of the Reverse Stock Split, every fifteen shares of our pre-Reverse Stock Split common stock were combined and reclassified into one share of our common stock. The Reverse Stock Split did not change the authorized number of shares or the par value of our common stock.

Share and per share data included in the Notes to Consolidated Financial Statements have been retroactively adjusted, as applicable, for the effect of the reverse stock splits. Certain of the information contained in the documents incorporated by reference herein and therein present information on our common stock on a pre-reverse stock split basis.

Recent Accounting Pronouncements

Effective January 1, 2018, we adopted the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*. The amended guidance establishes a single comprehensive model for companies to use in accounting for revenue arising from contracts with customers and superseded most of the existing revenue recognition guidance, including industry-specific guidance. There was no impact from adopting the standard on our financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which supersedes all existing guidance on accounting for leases in ASC Topic 840. ASU 2016-02 is intended to provide enhanced transparency and comparability by requiring lessees to record right-of-use assets and corresponding lease liabilities on the balance sheet. ASU 2016-02 will continue to classify leases as either finance or operating, with classification affecting the pattern of expense recognition in the statement of income. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. We plan to apply this guidance at January 1, 2019 and will record our leases on our consolidated balance sheets as right-of-use assets and lease liabilities. We also expect to elect this new standard’s available transition practical expedients. Consequently, financial information will not be updated and disclosures required under the new standard will not be provided for dates and periods before January 1, 2019. We have reviewed our leases and other agreements in order to determine the effects of the new guidance on our consolidated financial statements. We have determined that we have leases that meet the criteria for recognition of right-of-use assets and lease liabilities on the balance sheet under the new guidance. We are not party to any leases for which we are the lessor. We believe the adoption will cause us to recognize approximately \$1.0 million in each, right-of-use assets and lease liabilities, in our consolidated financial statements.

Effective January 1, 2018, the Company adopted the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, which provides guidance on eight specific cash flow classification issues. Prior to this ASU, GAAP did not include specific guidance on these eight cash flow classification issues. The adoption of this ASU did not have a material impact on our consolidated financial statements and disclosures.

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In July 2017, the FASB issued ASU 2017-11, *Earnings Per Shares (Topic 260), Distinguishing Liabilities from Equity (Topic 480) and Derivatives and Hedging (Topic 815)*: Part I, Accounting for Certain Financial Instruments with Down Round Features. ASU 2017-11 changes the classification analysis of certain equity-linked financial instruments, such as warrants and embedded conversion features, such that a down round feature is disregarded when assessing whether the instrument is indexed to an entity's own stock under Subtopic 815-40. As a result, a down round feature — by itself — no longer requires an instrument to be remeasured at fair value through earnings each period, although all other aspects of the indexation guidance under Subtopic 815-40 continue to apply. ASU 2017-11 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. Early adoption is permitted. We are currently assessing the potential impact of adopting ASU 2017-11 on our consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-13, *Disclosure Framework — Changes to the Disclosure Requirements for Fair Value Measurements* which eliminates, adds and modifies certain disclosure requirements for fair value measurements as part of the FASB's disclosure framework project. Adoption of this guidance is required for fiscal years and interim periods within those fiscal years, beginning after December 15, 2019. We are evaluating the impact of adopting this new standard on our financial statements.

Principles of Consolidation

The consolidated financial statements include the accounts of Superconductor Technologies Inc. and its wholly owned subsidiaries. All significant intercompany transactions have been eliminated from the consolidated financial statements.

Cash and Cash Equivalents

Cash and cash equivalents consist of highly liquid investments with original maturities of three months or less. Cash and cash equivalents are maintained with what management believes to be quality financial institutions and exceed FDIC limits. Historically, we have not experienced any losses due to such concentration of credit risk.

Accounts Receivable

We grant uncollateralized credit to our customers. We perform usual and customary credit evaluations of our customers before granting credit. Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is our best estimate of the amount of probable credit losses in our existing accounts receivable. We determine the allowance based on historical write-off experience. Past due balances are reviewed for collectability. Account balances are charged off against the allowance when we deem it is probable the receivable will not be recovered. We do not have any off-balance-sheet credit exposure related to our customers.

Revenue Recognition

On January 1, 2018, we adopted ASC Topic 606, *Revenue from Contracts with Customers*, and all of the related amendments and applied it to all contracts. The adoption ASC topic 606 has had no effect to our consolidated financial statements.

Commercial revenues are recognized once all of the following conditions have been met: a) an authorized purchase order has been received in writing, b) the customer's credit worthiness has been established, c) shipment of the product has occurred, d) title has transferred, and e) if stipulated by the contract, customer acceptance has occurred and all significant vendor obligations, if any, have been satisfied.

Government contract revenues are principally generated under research and development contracts. Revenues from research-related activities are derived from contracts with agencies of the U.S. Government.

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Credit risk related to accounts receivable arising from such contracts is considered minimal. All payments to us for work performed on contracts with agencies of the U.S. Government are subject to adjustment upon audit by the Defense Contract Audit Agency. Based on historical experience and review of our current project in process, we believe that adjustments from open audits will not have a significant effect on our financial position, results of operations or cash flows.

Shipping and Handling Fees and Costs

Shipping and handling fees billed to customers are included in net commercial product revenues. Shipping and handling fees associated with freight are generally included in cost of commercial product revenues.

Warranties

We offer warranties generally ranging from one to five years, depending on the product and negotiated terms of purchase agreements with our customers. Such warranties require us to repair or replace defective product returned to us during such warranty period at no cost to the customer. Our estimate for warranty related costs is recorded at the time of sale based on our actual historical product return rates and expected repair costs. Such costs have been within our expectations.

Indemnities

In connection with the sales and manufacturing of our commercial products, we indemnify, without limit or term, our customers and contract manufacturers against all claims, suits, demands, damages, liabilities, expenses, judgments, settlements and penalties arising from actual or alleged infringement or misappropriation of any intellectual property relating to our products or other claims arising from our products. We cannot reasonably develop an estimate of the maximum potential amount of payments that might be made under our indemnities because of the uncertainty as to whether a claim might arise and how much it might total. Historically, we have not incurred any expenses related to these indemnities.

Research and Development Costs

Research and development costs are charged to expense as incurred and include salary, facility, depreciation and material expenses. Research and development costs are charged to research and development expense.

Inventories

Inventories are stated at the lower of cost or net realizable value, with costs primarily determined using standard costs, which approximate actual costs utilizing the first-in, first-out method. We review inventory quantities on hand and on order and record, on a quarterly basis, a provision for excess and obsolete inventory and/or vendor cancellation charges related to purchase commitments. If the results of the review determine that a write-down is necessary, we recognize a loss in the period in which the loss is identified, whether or not the inventory is retained. Our inventory reserves establish a new cost basis for inventory and are not reversed until we sell or dispose of the related inventory. Such provisions are established based on historical usage, adjusted for known changes in demands for such products, or the estimated forecast of product demand and production requirements. Costs associated with idle capacity are charged to operations immediately.

Property and Equipment

Property and equipment are recorded at cost. Equipment is depreciated using the straight-line method over their estimated useful lives ranging from three to five years. Leasehold improvements and assets financed under capital leases are amortized over the shorter of their useful lives or the lease term. Furniture and fixtures are depreciated over seven years. Expenditures for additions and major improvements are capitalized. Expenditures

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for minor tooling, repairs and maintenance and minor improvements are charged to operations as incurred. When property or equipment is retired or otherwise disposed of, the related cost and accumulated depreciation are removed from the accounts. There were no disposals in 2017 or 2018.

Patents, Licenses and Purchased Technology

Patents and licenses are recorded at cost and are amortized using the straight-line method over the shorter of their estimated useful lives or approximately seventeen years.

Long-Lived Assets

The realizability of long-lived assets is evaluated periodically as events or circumstances indicate a possible inability to recover the carrying amount. Long-lived assets that will no longer be used in the business are written off in the period identified since they will no longer be used in operations and generate any positive cash flows for us. Periodically, long-lived assets that will continue to be used by us will need to be evaluated for recoverability. Such evaluation is based on various analyses, including cash flow and profitability projections, as well as alternative uses, such as government contracts or awards. The analyses necessarily involve significant management judgment. In the event the projected undiscounted cash flows are less than net book value of the assets, the carrying value of the assets will be written down to their estimated fair value. We tested our long lived assets for recoverability in each of the last three years and did not believe there was any impairment.

We have invested and will continue to invest significant capital in our Austin, Texas manufacturing facility to enable us to produce our Conductus wire products. Delays in the timing of our ability to, including but not limited to, raise additional capital, unexpected production delays, our ability to sell our Conductus wire products in large scale could substantially impact our estimates used in the determination of expected future cash flows and/or expected profitability. The accompanying consolidated financial statements do not include any adjustments that may result from the outcome of these uncertainties.

Income Taxes

We recognize deferred tax liabilities and assets based on the differences between the financial statement carrying amounts and the tax bases of assets and liabilities, using enacted tax rates in effect in the years the differences are expected to reverse. Deferred income tax benefit (expense) results from the change in net deferred tax assets or deferred tax liabilities. A valuation allowance is recorded when it is more likely than not that some or all deferred tax assets will not be realized.

The guidance further clarifies the accounting for uncertainty in income taxes and sets a consistent framework to determine the appropriate level of tax reserve to maintain for uncertain tax positions. This interpretation uses a two-step approach wherein a tax benefit is recognized if a position is more-likely-than-not to be sustained. The amount of the benefit is then measured to be the highest tax benefit that is greater than 50% likely to be realized and sets out disclosure requirements to enhance transparency of our tax reserves.

Unrecognized tax positions, if ever recognized in the consolidated financial statements, are recorded in the statement of operations as part of the income tax provision. Our policy is to recognize interest and penalties accrued on uncertain tax positions, if any, as part of the income tax provision.

No liabilities for uncertain tax positions were recorded in the current year. No interest or penalties on uncertain tax positions have been expensed to date. We are not under examination by any taxing authorities. The federal statute of limitations for examination of us is open for 2015 and subsequent filings. Additionally, the statute of limitations for examination of our net operating loss carryforwards is open for a 20 year period subsequent to each loss year.

We implemented ASU 2016-09 during the first quarter of 2017 as stipulated in the FASB guidance for publicly traded entities. To account for the implementation of ASU 2016-09, we accounted for previously

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unrecognized excess tax benefits by recognizing those benefits. Due to our full valuation allowance, this recognition has no effect on the net accrual after the valuation allowance.

Marketing Costs

All costs related to marketing and advertising our products are charged to operations as incurred or at the time the advertising takes place. Advertising costs were not material in each of the three years in the period ended December 31, 2018.

Net Loss Per Share

Basic and diluted net loss per share is computed by dividing net loss available to common stockholders by the weighted average number of common shares outstanding in each year. Net loss available to common stockholders is computed after deducting accumulated dividends on cumulative preferred stock, deemed dividends and accretion of redemption value on redeemable preferred stock for the period and beneficial conversion features on issuance of convertible preferred stock. Potential common shares are not included in the calculation of diluted loss per share because their effect is anti-dilutive.

Stock-based Compensation Expense

We have in effect several equity incentive plans under which stock options and awards have been granted to employees and non-employee members of the Board of Directors. We are required to estimate the fair value of share-based awards on the date of grant. The value of the award is principally recognized as expense ratably over the requisite service periods. We have estimated the fair value of stock options as of the date of grant using the Black-Scholes option pricing model. The Black-Scholes model considers, among other factors, the expected life of the award and the expected volatility of our stock price. We evaluate the assumptions used to value stock options on a quarterly basis. The fair values generated by the Black-Scholes model may not be indicative of the actual fair values of our equity awards, as they do not consider other factors important to those awards to employees, such as continued employment and periodic vesting.

The following table presents details of total stock-based compensation expense that is included in each functional line item on our consolidated statements of operations:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Cost of commercial product revenues	\$ 3,000	\$ 1,000	\$ 6,000
Research and development	12,000	47,000	142,000
Selling, general and administrative	<u>69,000</u>	<u>293,000</u>	<u>856,000</u>
	<u>\$84,000</u>	<u>\$341,000</u>	<u>\$1,004,000</u>

The impact to the consolidated statements of operations for 2018, 2017 and 2016 on basic and diluted earnings per share was \$0.04, \$0.32 and \$3.19, respectively. No stock compensation cost was capitalized during the three year period ended December 31, 2018.

Use of Estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting periods. The significant estimates in the preparation of the consolidated financial statements relate to the assessment of the carrying amount of accounts receivable, inventory, fixed assets, intangibles, fair value of options and warrants,

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estimated provisions for warranty costs, accruals for restructuring and lease abandonment costs, contract revenues, income taxes and disclosures related to the litigation. Actual results could differ from those estimates and such differences may be material to the consolidated financial statements.

Fair Value of Financial Instruments

We have estimated the fair value amounts of our financial instruments using the available market information and valuation methodologies considered appropriate. We determined the book value of our cash and cash equivalents, accounts receivable, and other current assets and other current liabilities as of December 31, 2018 and December 31, 2017 approximate fair value.

The fair value of our warrant derivative liability was estimated using the Binomial Lattice option valuation model.

Fair value for financial reporting purposes is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date, ASC 820, “*Fair Value Measurement and Disclosures*”, also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. ASC 820 describes three levels of inputs that may be used to measure fair value:

Level 1 — quoted prices in active markets for identical assets or liabilities

Level 2 — quoted prices for similar assets and liabilities in active markets or inputs that are observable

Level 3 — inputs that are unobservable (for example cash flow modeling inputs based on assumptions)

The fair value of our warrant liabilities was determined based on level 3 inputs. These derivative liabilities, which expired in August 2018 and had no value at December 31, 2018, were adjusted to reflect fair value at each period end, with any increase or decrease in the fair value being recorded in results of operations as Adjustment to Fair Value of Derivatives. See Note 5 — *Stockholders Equity — Warrants*.

Comprehensive Income

We have no items of other comprehensive income in any period and consequently have not included a Statement of Comprehensive Income.

Segment Information

We have historically operated in a single business segment: the research, development, manufacture and marketing of high performance products used in cellular base stations. We derived net commercial product revenues primarily from the sales of our AmpLink and SuperPlex products which we sold directly to wireless network operators in the United States. Net revenues derived principally from government contracts are presented separately on the consolidated statements of operations for all periods presented. As discussed in this Report, we are adapting our unique HTS material deposition techniques to produce our energy efficient, cost-effective and high performance Conductus wire.

Certain Risks and Uncertainties

Our long-term prospects are dependent upon the successful commercialization and market acceptance of our Conductus wire products. We do not currently have a customer buying significant amounts of our wire products. With respect to our Conductus wire business, we expect to also have some customer concentration in that

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business as we continue to commercialize our wire product. The loss of or reduction in sales, or the inability to collect outstanding accounts receivable, from any significant customer could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We currently rely on a limited number of suppliers for key components of our products. The loss of any of these suppliers could have material adverse effect on our business, financial condition, results of operations and cash flows.

In connection with the sales of our commercial products, we indemnify, without limit or term, our customers against all claims, suits, demands, damages, liabilities, expenses, judgments, settlements and penalties arising from actual or alleged infringement or misappropriation of any intellectual property relating to our products or other claims arising from our products. We cannot reasonably develop an estimate of the maximum potential amount of payments that might be made under our indemnities because of the uncertainty as to whether a claim might arise and how much it might total.

For more risks of our business, see Item 1A, “Risk Factors” in this Report and other filings with the Securities and Exchange Commission.

Note 3 — Short Term Borrowings

None

Note 4 — Income Taxes

We incurred a net loss in each year of operation since inception resulting in no current or deferred tax expense for 2018, 2017 or 2016.

Due to our operating losses, the 2017 Tax Act did not impact our 2018 operating results or income tax expense. The primary impact of the 2017 Tax Act was the re-measurement of our deferred tax assets, based upon the new U.S. statutory corporate tax rate of 21% and the required change to the related valuation allowance. The deferred tax assets decreased by \$2,380,000 as a result of the change in tax rates.

As of December 31, 2018, the Company’s foreign subsidiaries had negative earnings and profits. As a result, no income tax provision was required for the deemed repatriation tax or the global intangible low tax income (GILTI) tax.

The benefit for income taxes differs from the amount obtained by applying the federal statutory income tax rate to loss before benefit for income taxes for 2018, 2017 and 2016 as follows:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Tax benefit computed at federal statutory rate	21.0%	34.0%	34.0%
Increase (decrease) in taxes due to:			
Change in tax rate under tax reform		(25.0)	
Change in valuation allowance	(21.0)	(9.0)	(34.0)
	<u>— %</u>	<u>— %</u>	<u>— %</u>

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The significant components of deferred tax assets (liabilities) at December 31 are as follows:

	<u>2018</u>	<u>2017</u>
Loss carryforwards	\$ 4,355,000	\$ 2,563,000
Depreciation & Amortization	826,000	951,000
Stock Option Compensation	376,000	358,000
Other	127,000	34,000
Less: valuation allowance	<u>(5,686,000)</u>	<u>(3,906,000)</u>
	<u>\$ —</u>	<u>\$ —</u>

As of December 31, 2018, we had net operating loss carryforwards for federal and state income tax purposes of approximately \$345.9 million which expire in the years 2019 through 2037. Of these amounts, \$69.7 million resulted from the acquisition of Conductus. Under the Internal Revenue Code change of control limitations, a maximum of \$20.7 million will be available for reduction of future taxable income.

Due to the uncertainty surrounding their realization, we have recorded a full valuation allowance against our net deferred tax assets. Accordingly, no deferred tax asset has been recorded in the accompanying balance sheet. The valuation allowance increased by \$1,780,000 in 2018 and decreased by \$907,000 in 2017.

Section 382 of the Internal Revenue Code imposes an annual limitation on the utilization of net operating loss carryforwards based on a statutory rate of return (usually the “applicable federal funds rate,” as defined in the Internal Revenue Code) and the value of the corporation at the time of a “change of ownership” as defined by Section 382. We had changes in ownership in August 1999, December 2002, June 2009, August 2013, and December 2016. In addition, we acquired the right to Conductus’ net operating losses, which are also subject to the limitations imposed by Section 382. Conductus underwent six ownership changes, which occurred in February 1999, February 2001, December 2002, June 2009, August 2013, and December 2016. Therefore, the ability to utilize Conductus’ and our net operating loss carryforwards of \$327.7 million which were incurred prior to the 2016 ownership changes, will be subject in future periods to annual limitations of \$126,000. Net operating losses released from this limitation and/or incurred by us subsequent to the ownership changes and therefore not subject to this limitation totaled \$18.2 million. An additional \$126,000 in losses were released from limitation during the year under Section 382.

Note 5 — Stockholders’ Equity

Public Offerings

We have historically financed our operations through a combination of cash on hand, cash provided from operations, equipment lease financings, available borrowings under bank lines of credit and both private and public equity offerings.

On July 30, 2018 we completed a public offering of an aggregate of 2,571,429 shares of our common stock (or common stock equivalents) and warrants to purchase an aggregate of 2,571,429 shares of common stock with gross proceeds to us of \$9.0 million. The net proceeds to us from the offering, after deducting the placement agent fees and our estimated offering expenses, was \$7.98 million. The offering was priced at \$3.50 per share of common stock (or common stock equivalent), with each share of common stock (or common stock equivalent) sold with one five-year warrant to purchase one share of common stock, at an exercise price of \$3.50 per share.

In connection with the offering, we issued 1,390,000 shares of our common stock at a price of \$3.50 per share, with each share of common stock coupled with a five year warrant to purchase one share of common stock, at an exercise price of \$3.50 (the “Warrants”). These securities were offered in the form of a Class A Unit but were immediately separable and were issued separately at the closing.

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For certain investors who would otherwise hold more than 4.99% (or at the election of a purchaser, 9.99%) of our common stock following the registered offering, we issued to such investors an aggregate of 4,135,001.5 Class B Units (equivalent to 1,181,429 shares of our common stock), consisting of shares of a new class of preferred stock designated Series E Convertible Preferred Stock with a stated value of \$1,000 and which are convertible into our common stock at a conversion price equal to \$3.50 per share of common stock, together with an equivalent number of Warrants in the same form and economic terms based on the related purchase price as the purchasers of the Class A Units (the “Class B Units” and together with the “Class A Units”, the “Units”). These securities offered in the form of a Class B Unit were immediately separable and were issued separately at the closing. At September 29, 2018, 1,573,001.5 Series E Convertible Preferred Stock had been converted into 449,429 shares of common stock and 2,562 Series E Convertible Preferred Stock, convertible into 732,000 shares of common stock, remained unconverted. From September 29, 2018 through December 31, 2018, an additional 700 Series E Convertible Preferred Stock had been converted into 200,000 shares of common stock and 1,862 Series E Convertible Preferred Stock, convertible into 532,000 shares of common stock, remained unconverted. On March 21, 2019, the remaining 1,862 Series E Convertible Preferred Stock, were converted into 532,000 shares of common stock.

On March 9, 2018, we issued a total of 158,100 shares of common stock (or common stock equivalents) in the form of 119,000 shares of our common stock at a price of \$12.65 per share and, for investors who would otherwise hold more than 9.99% of the Company’s common stock following the registered offering, we agreed to issue to such investors pre-funded warrants to purchase 39,100 shares of the Company’s common stock at a price of \$12.55 per warrant subject to payment of an additional \$0.10 upon exercise, which are common stock equivalents. This registered offering of common stock (and common stock equivalents) provided gross proceeds to us of \$2.0 million, and net proceeds to us, after deducting the placement agent fees and our estimated offering expenses, of \$1.7 million. In a concurrent private placement, we issued to the investor unregistered warrants to purchase 158,100 shares of common stock. The warrants have an exercise price of \$11.40 per share, and are exercisable immediately and will expire five years and nine months from the date of issuance.

On April 4, 2018, the 39,100 pre-funded warrants issued in connection with our March 2018 financing noted above were exercised, on a cashless basis, and we issued 38,720 shares of our common stock.

We did not conduct any offerings in 2017.

On December 14, 2016 we issued 179,878 shares of common stock at a price of \$15 per share, with each share of common stock coupled with a five year warrant to purchase one share of common stock, at an exercise price of \$20. For certain investors who would otherwise have held more than 4.99% of our common stock following the registered offering, we agreed to issue to such investors, in lieu of shares of common stock, 7,586.82 shares of a new class of preferred stock designated Series D Convertible Preferred Stock with a stated value of \$1,000 and which are convertible into our common stock at a conversion price equal to \$15 per share of common stock, together with an equivalent number of warrants in the same form and economic terms based on the related purchase price as the purchasers of the common stock. Each of the Series D Preferred and the warrants include a beneficial ownership limitation such that the holder may not exercise the warrant if, following such exercise, the holder (together with its affiliates and certain related parties) would hold more than 4.99% of the number of shares of our common stock outstanding, which limitation, subject to increase or decrease upon at least 60 days’ notice by a holder, cannot be increased above 9.99%. The sale of these shares reset the exercise price of the warrants related to our August 2013 financing to \$15. This offering provided gross proceeds of \$10.3 million and, after deducting the placement agent fees and our offering expenses, net proceeds of \$9.2 million.

On August 2, 2016, we issued (i) an aggregate of 29,360 shares of our common stock at a price of \$30.8375 per share and (ii) to investors, whose purchase of our common stock would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% of our outstanding common stock immediately following the consummation of this offering, an aggregate of 1,294.595255 shares of

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our Series C Convertible Preferred Stock. The Series C Preferred has a stated value of \$1,000 and is convertible into shares of our common stock at \$30.8375 per share. Subject to certain prohibitions on conversion, the 1,294,595,255 shares of Series C Preferred would be convertible into an aggregate of 41,981 shares of our common stock. In a concurrent private placement, each Purchaser in the registered offering also received warrants to purchase 0.75 of a share of common stock for each share of common stock (or common stock underlying the Series C Preferred) purchased in such registered offering, or up to an aggregate of 53,506 warrants. The warrants have an exercise price of \$30 per share and are exercisable during the period following the nine month anniversary of the date of issuance of the warrants until the five and a half year anniversary of the date of issuance. The warrants are exercisable for cash or, solely in the absence of an effective registration statement or prospectus, by cashless exercise. Each of the Series C Preferred and the warrants include a beneficial ownership limitation such that the holder may not exercise the warrant if, following such exercise, the holder (together with its affiliates and certain related parties) would hold more than 4.99% of the number of shares of our common stock outstanding, which limitation, subject to increase or decrease upon at least 60 days' notice by a holder, cannot be increased above 9.99%. In addition, we granted the placement agent in the registered offering and concurrent private placement, an aggregate of 4,994 five-year warrants to purchase our common shares at \$38.55. This offering provided gross proceeds of \$2.2 million and, after deducting the placement agent fees and our offering expenses, net proceeds of \$1.9 million.

Preferred Stock

Pursuant to our Certificate of Incorporation, the Board of Directors is authorized to issue up to 2,000,000 shares of preferred stock (par value \$.001 per share) in one or more series and to fix the rights, preferences, privileges, and restrictions, including the dividend rights, conversion rights, voting rights, redemption price or prices, liquidation preferences, and the number of shares constituting any series or the designation of such series. There is no beneficial conversion feature related to the conversion or liquidation of any of our preferred shares.

In February 2008, we issued to Hunchun BaoLi Communication Co. Ltd. ("BAOLI") and two related purchasers a total of (a) 3,101,361 shares of our common stock and (b) 611,523 shares of our 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 was initially convertible into ten shares of our common stock with any conversion subject to the number of shares of our common stock beneficially owned by BAOLI and affiliates following such conversion not exceeding 9.9% of our outstanding common stock. At December 31, 2018, 328,925 shares of our Series A Preferred Stock were outstanding which, subject to the foregoing restrictions, are convertible into 1,827 shares of common stock. Except for a preference on liquidation of \$.001 per share, each share of Series A Preferred Stock is the economic equivalent of the number of shares of common stock into which it is convertible. Except as required by law, the Series A Preferred Stock does not have any voting rights.

As of December 31, 2018, all of our issued Series B, C and D Preferred Stock had been converted into our common stock.

In late July 2018, we issued 4,135,0015 Series E Convertible Preferred Stock with a stated value of \$1,000 and which are convertible into our common stock at a conversion price equal to \$3.50 per share of common stock (see *Public Offerings* above). At December 31, 2018, 2,273,0015 Series E Convertible Preferred Stock had been converted into 649,429 shares of common stock and 1,862 Series E Convertible Preferred Stock, convertible into 532,000 shares of common stock, remained unconverted. On March 21, 2019, the remaining 1,862 Series E Convertible Preferred Stock, were converted into 532,000 shares of common stock.

Common Stock

On July 30, 2018 we issued 1,390,000 shares of common stock at a price of \$3.50 per share, with each share of common stock coupled with a five year warrant to purchase one share of common stock, at an exercise price of

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\$20. For certain investors who would otherwise hold more than 4.99% of our common stock following the registered offering, we agreed to issue to such investors in the form of Class A Units, 4,435,001.5 shares of a new class of preferred stock designated Series E Convertible Preferred Stock with a stated value of \$1,000 and which are convertible into 1,181,429 shares of our common stock at a conversion price equal to \$3.50 per share.

On April 4, 2018, 39,100 pre-funded warrants issued in connection with our March 9, 2018 financing noted below were exercised, on a cashless basis, and we issued 38,720 shares of our common stock.

On March 9, 2018, we issued a total of 158,100 shares of common stock (or common stock equivalents) in the form of 119,000 shares of our common stock at a price of \$12.65 per share and, for investors who would otherwise hold more than 9.99% of the Company's common stock following the registered offering, we agreed to issue to such investors pre-funded warrants to purchase 39,100 shares of the Company's common stock at a price of \$12.55 per warrant subject to payment of an additional \$0.10 upon exercise, which are common stock equivalents.

On December 14, 2016 we issued 179,878 shares of common stock at a price of \$15 per share, with each share of common stock coupled with a five year warrant to purchase one share of common stock, at an exercise price of \$20. For certain investors who would otherwise hold more than 4.99% of our common stock following the registered offering, we agreed to issue to such investors in the form of Class B Units, 7,586.82 shares of a new class of preferred stock designated Series D Convertible Preferred Stock with a stated value of \$1,000 and which are convertible into 505,788 shares of our common stock at a conversion price equal to \$15 per share.

On July 27, 2016, we entered into a Securities Purchase Agreement with certain investors pursuant to which we agreed to issue, (i) an aggregate of 29,360 shares of our common stock at a price of \$30.8375 per share and (ii) to investors, whose purchase of our common stock would otherwise result in the investor, together with its affiliates and certain related parties, beneficially owning more than 4.99% of our outstanding common stock immediately following the consummation of the offering, an aggregate of 1,294,595,255 shares of our Series C Convertible Preferred Stock (the "Series C Preferred"). The Series C Preferred had a stated value of \$1,000 and were convertible into 41,981 shares of our common stock at \$30.8375 per share.

Equity Awards

At December 31, 2018, we had two equity award option plans, the 2003 Equity Incentive Plan and the 2013 Equity Incentive Plan (collectively, the "Stock Option Plans") although we can only grant new options under the 2013 Equity Incentive Plan. Under the Stock Option Plans, stock awards may be made to our directors, key employees, consultants, and non-employee directors and may consist of stock options, stock appreciation rights, restricted stock awards, performance awards, and performance share awards. Stock options must be granted at prices no less than the market value on the date of grant.

There were no stock option exercises in the last three years.

No stock options were granted in 2017 or 2016, but stock options were granted in 2018. The weighted average fair value of options has been estimated at the date of the grant using the Black-Scholes option-pricing model. The following are the significant weighted average assumptions used for estimating the fair value under our stock option plans:

	2018	2017	2016
Per share fair value at grant date	\$ 1.45	—	—
Risk free interest rate	3.0%	—	—
Expected volatility	224.7%	—	—
Dividend yield	0%	—	—
Expected life in years	4.0	—	—

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The expected life was based on the contractual term of the options and the expected employee exercise behavior. Typically, options to our employees and Board Members have a 2 year vesting term and a 10 year contractual term and vest at 50% after one year and 50% after two years. The risk-free interest rate is based on the U. S. Treasury zero-coupon issues with a remaining term equal to the expected option life assumed at the grant date. The future volatility is based on our 4 year historical volatility. We used an expected dividend yield of 0% because we have never paid a dividend and do not anticipate paying dividends. We assumed aggregate forfeiture rates of 10% to 20% based on historical stock option cancellation rates over the last 4 years.

At December 31, 2018, common stock totaling 78,452 shares were available for future grants and options covering 140,323 shares were outstanding but not yet exercised. Option activity during the three years ended December 31, 2018 was as follows:

	<u>Number of Shares</u>	<u>Weighted Average Exercise Price</u>
Outstanding at December 31, 2015	13,157	\$ 381.00
Granted	—	—
Canceled	(41)	6,742.20
Exercised	—	—
Outstanding at December 31, 2016	13,116	360.30
Granted	—	—
Canceled	(503)	45.10
Exercised	—	—
Outstanding at December 31, 2017	12,613	370.30
Granted	128,000	1.92
Canceled	(290)	4,723.90
Exercised	—	—
Outstanding at December 31, 2018	<u>140,323</u>	<u>\$ 25.29</u>

The following table summarizes information concerning currently outstanding and exercisable stock options at December 31, 2018:

<u>Range of Exercise Prices</u>	<u>Number Outstanding</u>	<u>Weighted Average Remaining Contractual Life in Years</u>	<u>Weighted Average Exercise Price</u>	<u>Exercisable</u>	
				<u>Number Exercisable</u>	<u>Weighted Average Exercise Price</u>
\$1.92 - \$1.92	128,000	9.8	\$ 1.92	0	\$ —
33.00 - 33.00	5,267	6.9	33.00	5,267	33.00
318.00 - 318.00	6,217	4.9	318.00	6,217	318.00
378.00 - 2,844.00	777	4.1	1,087.68	777	1,087.68
\$3,150.00 - \$5,148.00	62	1.5	4,722.63	62	4,722.63
	<u>140,323</u>	9.4	\$ 25.29	<u>12,323</u>	\$ 268.00

Our outstanding options expire on various dates through October 2028. The weighted-average contractual term of outstanding options was 9.4 years and the weighted-average contractual term of currently exercisable stock options was 5.6 years. There were no exercisable options at December 31, 2018, December 31, 2017 or December 31, 2016 with a price less than the then market value.

The grant date fair value of each share of our restricted stock awards is equal to the fair value of our common stock at the grant date. Shares of restricted stock under awards all have service conditions and vest over

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one to four years. The following is a summary of our restricted stock award transactions for the year ended December 31, 2018:

	Number of Shares	Weighted Average Grant Date Fair Value
Balance nonvested at December 31, 2017	3,166	\$ 10.70
Granted	—	—
Vested	(1,166)	10.81
Forfeited	—	—
Balance nonvested at December 31, 2018	<u>2,000</u>	<u>\$ 10.68</u>

The weighted-average grant date fair value of our restricted stock awards, their total fair value and the fair value of all shares that have vested during each of the past three years is as follows:

	Year ended December 31		
	2018	2017	2016
Weight-average grant date fair value	—	\$ 10.70	—
Fair value of restricted stock awards granted	—	\$ 48,000	—
Fair value of restricted stock awards vested	—	\$ 23,000	—

For the majority of restricted stock awards granted, the number of shares issued on the date the restricted stock awards vest may be net of the minimum statutory withholding requirements that we pay in cash to the appropriate taxing authorities on behalf of our employees. For the three years presented here, there was no such withholding.

No stock compensation cost was capitalized during the periods. At December 31, 2018, the total compensation cost related to non-vested option awards not yet recognized was \$167,000 and the weighted-average period over which the cost is expected to be recognized is 1.2 years. The total compensation cost related to non-vested stock awards not yet recognized was \$12,000, and the weighted-average period over which the cost is expected to be recognized is 9 months.

Warrants

The following is a summary of outstanding warrants at December 31, 2018:

	Common Shares			
	Total	Currently Exercisable	Price per Share	Expiration Date
(1) Warrants related to April 2013 financing	1,713	1,713	\$ 817.50	April 26, 2019
(2) Warrants related to February 2015 agreement	306	306	\$ 450.45	February 13, 2020
(3) Warrants related to March 2015 financing	10,209	10,209	\$ 244.88	September 24, 2020
(4) Warrants related to March 2015 financing	1,021	1,021	\$ 306.09	March 20, 2020
(5) Warrants related to October 2015 financing	135,517	135,517	\$ 60.00	October 14, 2020
(6) Warrants related to October 2015 financing	9,034	9,034	\$ 65.63	October 14, 2020
(7) Warrants related to August 2016 financing	53,506	53,506	\$ 30.00	February 2, 2022
(8) Warrants related to August 2016 financing	4,994	4,994	\$ 38.55	August 2, 2021
(9) Warrants related to December 2016 financing	685,667	685,667	\$ 20.00	December 14, 2021
(10) Warrants related to March 2018 financing	158,100	158,100	\$ 11.40	September 9, 2023
(11) Warrants related to March 2018 financing	11,067	11,067	\$ 15.80	March 6, 2023
(12) Warrants related to July 2018 financing	2,571,429	2,571,429	\$ 3.50	July 25, 2023
(13) Warrants related to July 2018 financing	154,286	—	\$ 4.38	July 25, 2023

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On July 30, 2018 we completed a public offering of an aggregate of 2,571,429 shares of our common stock (or common stock equivalents initially in the form of Series E Preferred Stock) and warrants to purchase an aggregate of 2,571,429 shares of common stock with gross proceeds to us of \$9.0 million. The net proceeds to us from the offering, after deducting the placement agent fees and our estimated offering expenses, was \$7.98 million. The offering was priced at \$3.50 per share of common stock (or common stock equivalent), with each share of common stock (or common stock equivalent) sold with one five-year warrant to purchase one share of common stock, at an exercise price of \$3.50 per share. The placement agent also received warrants to purchase 154,286 shares of common stock, at an exercise price of \$4.375, that are subject to a six month lock-up and will expire July 25, 2023.

On March 7, 2018, we announced the pricing of a registered offering of common stock (and common stock equivalents) with total gross proceeds of approximately \$2 million. The closing of the registered public offering was completed on March 9, 2018. The net proceeds to us from the registered offering, after deducting the placement agent fees and our estimated offering expenses, was \$1.7 million. In a concurrent private placement, we issued to the investor in the registered offering, an unregistered warrant (the “Warrants”) to purchase one share of common stock for each share of common stock or Pre-funded Warrants purchased in the registered offering. The Warrants have an exercise price of \$11.40 per share, shall be exercisable immediately and will expire five years and six months from the date of issuance. The Warrants are exercisable for cash or, solely in the absence of an effective registration statement or prospectus, by cashless exercise. The exercise price of the Warrants is not subject to a “price-based” anti-dilution adjustment.

On December 14, 2016 we issued 179,878 shares of common stock at a price of \$15 per share, with each share of common stock coupled with a five year warrant to purchase one share of common stock, at an exercise price of \$20. For certain investors who would otherwise have held more than 4.99% of our common stock following the registered offering, we agreed to issue to such investors, in lieu of shares of common stock, 7,586.82 shares of a new class of preferred stock designated Series D Convertible Preferred Stock with a stated value of \$1,000 and which are convertible into 505,788 shares of our common stock at a conversion price equal to \$15 per share. The warrants include a beneficial ownership limitation such that the holder may not exercise the warrant if, following such exercise, the holder (together with its affiliates and certain related parties) would hold more than 4.99% of the number of shares of our common stock outstanding, which limitation, subject to increase or decrease upon at least 60 days’ notice by a holder, cannot be increased above 9.99%.

On August 2, 2016, in a concurrent private placement transaction, investors who purchased shares of common stock or Series C Preferred in our registered offering received warrants to purchase 0.75 of a share of common stock for each share of common stock (or common stock underlying the Series C Preferred) purchased in such registered offering, or up to an aggregate of 53,506 warrants. The warrants have an exercise price of \$30 per share and are exercisable during the period following the nine month anniversary of the date of issuance of the warrants until the five and a half year anniversary of the date of issuance. The warrants are exercisable for cash or, solely in the absence of an effective registration statement or prospectus, by cashless exercise. The warrants include a beneficial ownership limitation such that the holder may not exercise the warrant if, following such exercise, the holder (together with its affiliates and certain related parties) would hold more than 4.99% of the number of shares of our common stock outstanding, which limitation, subject to increase or decrease upon at least 60 days’ notice by a holder, cannot be increased above 9.99%. In addition, we granted the placement agent in the registered offering and concurrent private placement, an aggregate of 4,994 five-year warrants to purchase our common shares at \$38.55.

Our warrants are exercisable by paying cash or, solely in the absence of an effective registration statement or prospectus, by cashless exercise for unregistered shares of common stock. The exercise price of the warrants is subject to standard antidilutive provision adjustment in the case of 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. The

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exercise price of the warrants is not subject to “price-based” anti-dilution adjustment. We have determined that these warrants related to issuance of common stock are subject to equity treatment because the warrant holder has no right to demand cash settlement and there are no unusual anti-dilution rights.

Certain warrants that expired on August 9, 2018 were not considered indexed to our common shares under ASC 815-40, and required separate accounting as derivative instruments with changes in fair value recognized in earnings each period. The warrants contained a provision whereby the warrant exercise price would be decreased in the event that future common stock issuances were made at a price less than the then exercise price. Due to the potential variability of their exercise price, these warrants do not qualify for equity treatment, and therefore were recognized as a liability. The warrant liability was adjusted to fair value each reporting period, and any change in value was recognized in the statement of operations. Using the binomial lattice valuation model, including an equal probabilities tree and early exercise factor of 30%, the significant weighted average assumptions for these expired warrants at December 31, 2017 was as follows: expected life of 8 months; risk free interest rates of 1.5% expected volatility of 69% and; dividend yield of 0% and the December 31, 2017 fair value of these warrants was estimated to be \$28,000. Due to their expiration these warrants had no value at December 31, 2018. The fair value of warrants accounted for as derivative liabilities was decreased by \$28,000 from December 31, 2017 to December 31, 2018.

Using the binomial lattice valuation model, including an equal probabilities tree and early exercise factor of 30%, the significant weighted average assumptions for estimating the fair value of these warrant liabilities at December 31, 2017 as follows: expected life of 8 months; risk free interest rates of 1.5%; expected volatility of 69% and; dividend yield of 0%. The December 31, 2017 fair value of these warrants was estimated to be \$28,000. The fair value was reduced by \$99,000 from December 31, 2016 to December 31, 2017 principally due to our reduced market stock price.

Note 6 — Employee Savings Plan

In December 1989, the Board of Directors approved a 401(k) savings plan (the “401(k) Plan”) for our employees that became effective in 1990. Eligible employees may elect to make contributions under the terms of the 401(k) Plan; however, contributions by us are made at the discretion of management. We made a contribution of \$72,000 to the 401(k) plan in 2018, and \$66,000 and \$62,000 in 2017 and 2016, respectively.

Note 7 — Commitments and Contingencies

Operating Leases

We lease our offices and production facilities under non-cancelable operating leases. All of our operations, including our manufacturing facilities, are located in an industrial complex in Austin, Texas. We occupy approximately 94,000 square feet in Austin, Texas under a long-term lease that expires in April 2020. Our Austin lease contains a renewal option and also requires us to pay utilities, insurance, taxes and other operating expenses. Although we currently have excess capacity, we believe this facility can be managed in a flexible and cost effective manner and is adequate to meet current and reasonably anticipated needs for approximately the next two years.

For 2018, 2017 and 2016, rent expense was \$387,000, \$385,000, and \$643,000, respectively.

Patents and Licenses

We have entered into various licensing agreements requiring royalty payments ranging from 0.13% to 2.5% of specified product sales. Certain of these agreements contain provisions for the payment of guaranteed or minimum royalty amounts. In the event that we fail to pay any minimum annual royalties, these licenses may automatically be terminated. These royalty obligations terminate in 2026. Royalty expenses totaled \$45,000 in

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2018, \$45,000 in 2017 and \$45,000 in 2016. Under the terms of certain royalty agreements, royalty payments made may be subject to audit. There have been no audits to date and we do not expect any possible future audit adjustments to be significant.

The minimum lease payments under operating leases and license obligations are as follows:

Years Ended December 31,	Licenses	Operating Leases
2019	\$10,000	\$ 935,000
2020	10,000	230,000
2021	10,000	3,000
2022	10,000	2,000
2023	10,000	—
Thereafter	20,000	—
Total payments	\$70,000	\$1,170,000

Note 8 — Contractual Guarantees and Indemnities

During our normal course of business, we make certain contractual guarantees and indemnities pursuant to which we may be required to make future payments under specific circumstances.

Warranties

We establish reserves for future product warranty costs that are expected to be incurred pursuant to specific warranty provisions with our customers. Our warranty reserves are established at the time of sale and updated throughout the warranty period based upon numerous factors including historical warranty return rates and expenses over various warranty periods.

Intellectual Property Indemnities

We indemnify certain customers and our contract manufacturers against liability arising from third-party claims of intellectual property rights infringement related to our products. These indemnities appear in development and supply agreements with our customers as well as manufacturing service agreements with our contract manufacturers, are not limited in amount or duration and generally survive the expiration of the contract. Given that the amount of any potential liabilities related to such indemnities cannot be determined until an infringement claim has been made, we are unable to determine the maximum amount of losses that we could incur related to such indemnifications.

Director and Officer Indemnities and Contractual Guarantees

We have entered into indemnification agreements with our directors and executive officers, which require us to indemnify such individuals to the fullest extent permitted by Delaware law. Our indemnification obligations under such agreements are not limited in amount or duration. Certain costs incurred in connection with such indemnifications may be recovered under certain circumstances under various insurance policies. Given that the amount of any potential liabilities related to such indemnities cannot be determined until a lawsuit has been filed against a director or executive officer, we are unable to determine the maximum amount of losses that we could incur relating to such indemnities. Historically, any amounts payable pursuant to such director and officer indemnities have not had a material negative effect on our business, financial condition or results of operations.

We have also entered into severance and change in control agreements with certain of our executives. These agreements provide for the payment of specific compensation benefits to such executives upon the termination of their employment with us.

[Table of Contents](#)**General Contractual Indemnities/Products Liability**

During the normal course of business, we enter into contracts with customers where we agree to indemnify the other party for personal injury or property damage caused by our products. Our indemnification obligations under such agreements are not generally limited in amount or duration. Given that the amount of any potential liabilities related to such indemnities cannot be determined until a lawsuit has been filed, we are unable to determine the maximum amount of losses that we could incur relating to such indemnities. Historically, any amounts payable pursuant to such indemnities have not had a material negative effect our business, financial condition or results of operations. We maintain general and product liability insurance as well as errors and omissions insurance, which may provide a source of recovery to us in the event of an indemnification claim.

Note 9 — Legal Proceedings

From time to time, we are party to various lawsuits, claims and other legal proceedings that arise in the ordinary course of our business. We are not currently a party to any legal proceedings that we believe would reasonably be expected to have a material adverse effect on our business, financial position or results of operations or cash flows.

Note 10 — Loss Per Share

Loss per share is based on the weighted-average number of common shares outstanding and diluted earnings (loss) per share was based on the weighted-average number of common shares outstanding plus all potentially dilutive common shares outstanding.

Since their impact would be anti-dilutive, our loss per common share does not include the effect of the assumed exercise or vesting of any of the following shares:

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Outstanding stock options	140,323	12,613	13,115
Unvested restricted stock awards	2,000	3,166	56
Outstanding warrants	3,796,849	929,416	945,546
Total	<u>3,939,172</u>	<u>945,195</u>	<u>958,717</u>

Also, the convertible preferred stock, which is convertible into 533,827 and 1,827 and 324,615 shares of common stock at December 31, 2018 and 2017 and 2016, respectively, was not included since their impact would be anti-dilutive.

Note 11 — Details of Certain Financial Statement Components and Supplemental Disclosures of Cash Flow Information and Non-Cash Activities*Balance Sheet Data:*

	<u>December 31, 2018</u>	<u>December 31, 2017</u>
Accounts receivable:		
Accounts receivable-trade	\$ 3,000	\$ 154,000
Less: allowance for doubtful accounts	(3,000)	(3,000)
	<u>\$ —</u>	<u>\$ 151,000</u>

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	December 31, 2018	December 31, 2017
Inventories:		
Raw materials	\$ 161,000	\$ 74,000
Reserve for raw materials	—	—
Work-in-process	12,000	10,000
Reserve for work-in-process	—	—
Finished goods	—	18,000
Reserve for finished goods	—	—
	<u>\$ 173,000</u>	<u>\$ 102,000</u>
	December 31, 2018	December 31, 2017
Property and Equipment:		
Equipment	\$ 11,911,000	\$ 11,723,000
Leasehold improvements	1,065,000	1,065,000
Furniture and fixtures	205,000	205,000
	<u>13,181,000</u>	<u>12,993,000</u>
Less: accumulated depreciation and amortization	<u>(12,172,000)</u>	<u>(11,200,000)</u>
	<u>\$ 1,009,000</u>	<u>\$ 1,793,000</u>

Depreciation and amortization expense amounted to \$1,015,000, \$1,885,000, and \$2,061,000 in 2018, 2017, 2016, respectively.

	December 31, 2018	December 31, 2017
Patents, Licenses and Purchased Technology:		
Patents pending	\$ —	\$ 44,000
Patents issued	1,712,000	1,682,000
Less accumulated amortization	<u>(1,026,000)</u>	<u>(984,000)</u>
Net patents issued	<u>686,000</u>	<u>698,000</u>
	<u>\$ 686,000</u>	<u>\$ 742,000</u>

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Amortization expense related to these items totaled \$43,000, \$36,000 and, \$78,000 in 2018, 2017, and 2016, respectively. Amortization expenses related to these items are expected to total \$40,000 in 2019 and \$40,000 in 2020.

	<u>December 31,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>
Accrued Expenses and Other Long Term Liabilities:		
Salaries payable	\$ 119,000	\$ 104,000
Compensated absences	195,000	173,000
Compensation related	6,000	4,000
Warranty reserve	8,000	8,000
Deferred rent	39,000	46,000
Other	189,000	172,000
Fair value of warrant derivatives	—	28,000
Total	<u>556,000</u>	<u>535,000</u>
Less current portion	<u>(539,000)</u>	<u>(481,000)</u>
Long-term portion	<u>\$ 17,000</u>	<u>\$ 54,000</u>

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Warranty Reserve Activity:			
Beginning balance	\$8,000	\$8,000	\$ 23,000
Additions	—	—	—
Deductions	—	—	(15,000)
Ending balance	<u>\$8,000</u>	<u>\$8,000</u>	<u>\$ 8,000</u>

SUPERCONDUCTOR TECHNOLOGIES INC.

Schedule II — Valuation and Qualifying Accounts

	Beginning Balance	Additions		Deductions	Ending Balance
		Charged to Costs & Expenses	Charged to Other Accounts		
2018					
Allowance for Uncollectible Accounts	\$ 3,000	\$ —	\$ —	\$ —	\$ 3,000
Reserve for Inventory Obsolescence	—	—	—	—	—
Reserve for Warranty	8,000	—	—	—	8,000
Deferred Tax Asset Valuation Allowance	3,906,000	—	1,780,000	—	5,686,000
2017					
Allowance for Uncollectible Accounts	5,000	2,000	—	—	3,000
Reserve for Inventory Obsolescence	—	—	—	—	—
Reserve for Warranty	8,000	—	—	—	8,000
Deferred Tax Asset Valuation Allowance	2,999,000	—	907,000	—	3,906,000
2016					
Allowance for Uncollectible Accounts	5,000	—	—	—	5,000
Reserve for Inventory Obsolescence	774,000	—	774,000	—	—
Reserve for Warranty	23,000	—	—	(15,000)	8,000
Deferred Tax Asset Valuation Allowance	\$ 17,275,000	\$ —	\$ —	\$(14,276,000)	\$ 2,999,000

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized, on this 29th day of March 2019.

SUPERCONDUCTOR TECHNOLOGIES INC.

BY: /s/ Jeffrey A. Quiram
Jeffrey A. Quiram
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL THESE PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints William J. Buchanan, his attorney-in-fact, with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Jeffrey A. Quiram</u> Jeffrey A. Quiram	President, Chief Executive Officer and Director (Principal Executive Officer)	March 29, 2019
<u>/s/ William J. Buchanan</u> William J. Buchanan	Chief Financial Officer (Principal Financial and Accounting Officer)	March 29, 2019
<u>/s/ Julia S. Johnson</u> Julia S. Johnson	Director	March 29, 2019
<u>/s/ David W. Vellequette</u> David W. Vellequette	Director	March 29, 2019
<u>/s/ Lynn J. Davis</u> Lynn J. Davis	Director	March 29, 2019
<u>/s/ Martin A. Kaplan</u> Martin A. Kaplan	Chairman of the Board	March 29, 2019

SUBSIDIARIES OF SUPERCONDUCTOR TECHNOLOGIES INC.

Conductus, Inc., a Delaware corporation
STI Investments Limited, a British Virgin Islands company
Superconductor Investments (Mauritius) Limited, a Mauritius company

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement of Superconductor Technologies Inc. on Form S-8 (File Nos. 333-106594, 333-126121, 333-193008), on Form S-3 (File No. 333-228676, 333-202702), and on Form S-1 (File Nos. 333-226025, 333-224148) of our report (which includes an explanatory paragraph as to the Company's ability to continue as a going concern), dated March 29, 2019, with respect to our audits of the consolidated financial statements of Superconductor Technologies Inc. as of as of December 31, 2018 and 2017, and for each of the three years in the period ended December 31, 2018, appearing in the Annual Report on Form 10-K of Superconductor Technologies Inc. for the year ended December 31, 2018.

/s/ Marcum LLP

Marcum LLP
Los Angeles, California
March 29, 2019

**Statement Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by
Principal Executive Officer and Principal Financial Officer
Regarding Facts and Circumstances Relating to Exchange Act Filings**

I, Jeffrey A. Quiram, certify that:

1. I have reviewed this annual report on Form 10-K of Superconductor Technologies Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 29, 2019

/s/ Jeffrey A. Quiram

Jeffrey A. Quiram

President and Chief Executive Officer

**Statement Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by
Principal Executive Officer and Principal Financial Officer
Regarding Facts and Circumstances Relating to Exchange Act Filings**

I, William J. Buchanan, certify that:

1. I have reviewed this annual report on Form 10-K of Superconductor Technologies Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 29, 2019

/s/ William J. Buchanan

William J. Buchanan
Chief Financial Officer (Principal Accounting and
Financial Officer)

Statement Pursuant to Section 906 the Sarbanes-Oxley Act of 2002
By
Principal Executive Officer and Principal Financial Officer
Regarding Facts and Circumstances Relating to Exchange Act Filings

Dated: March 29, 2019

I, Jeffrey A. Quiram, Chief Executive Officer of Superconductor Technologies Inc., hereby certify, to my knowledge, that:

1. the accompanying Annual Report on Form 10-K of Superconductor Technologies for the annual period ended December 31, 2018 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities and Exchange Act of 1934, as amended; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Superconductor Technologies Inc.

IN WITNESS WHEREOF, the undersigned has executed this Statement as of the date first written above.

/s/ Jeffrey A. Quiram

Jeffrey A. Quiram

President and Chief Executive Officer

Statement Pursuant to Section 906 the Sarbanes-Oxley Act of 2002
By
Principal Executive Officer and Principal Financial Officer
Regarding Facts and Circumstances Relating to Exchange Act Filings

Dated: March 29, 2019

I, William J. Buchanan, Chief Financial Officer of Superconductor Technologies Inc., hereby certify, to my knowledge, that:

1. the accompanying Annual Report on Form 10-K of Superconductor Technologies for the annual period ended December 31, 2018 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities and Exchange Act of 1934, as amended; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Superconductor Technologies Inc.

/s/ William J. Buchanan

William J. Buchanan
Chief Financial Officer (Principal Financial and Accounting
and Officer)