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Form 4	124I	35
March	21,	2018

Filed Pursuant to Rule 424(b)(5)

Registration No. 333-211374

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell nor are we seeking an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED MARCH 21, 2018

PRELIMINARY PROSPECTUS SUPPLEMENT

(to Prospectus dated May 27, 2016)	
Shares	
Common Stock	
We are offering shares of our common stock. Our common stock is listed on The NASDAQ Capital Market under the symbol RESN. March 20, 2018, the last reported sale price for our common stock on The NASDAQ Capital Market was \$4.41 per share.	Эn
Investing in our common stock involves a high degree of risk. See Risk Factors beginning on page S-3 of this prospectus supplement.	

Public Offering Price Underwriting Discount (1) Proceeds, Before Expenses, to Resonant Inc.	Per Share \$ \$ \$	Total \$ \$ \$
(1) In addition, we have agreed to reimburse up to \$100,000 of the out-of-pocket fees and expering offering. See Underwriting beginning on page S-28 of this prospectus supplement for addition compensation.		
We have granted the underwriter the 30-day option to purchase up to an additional price, less the underwriting discount to cover over-allotments, if any.	ares of our common stock	c at the public offering
The Securities and Exchange Commission and state securities regulators have not approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. It is illegal for any person to tell you otherwise.		
We anticipate that delivery of the shares of common stock will be made on or about March , 2	2018.	
Sole Book-Running Manager		

Needham & Company

The date of this prospectus supplement is March $\,$, 2018.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement is a supplement to the accompanying prospectus that is also a part of this document. This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 (File No. 333-211374) that we filed with the Securities and Exchange Commission, or the SEC, using a shelf registration process. Under this shelf registration process, we may from time to time sell any combination of securities described in the accompanying prospectus in one or more offerings up to a total of \$35.0 million.

This prospectus supplement and the accompanying prospectus do not constitute an offer to sell or a solicitation of an offer to buy the shares offered hereby in any jurisdiction where, or to any person to whom, it is unlawful to make such offer or solicitation.

This document is in two parts. The first part is this prospectus supplement, which describes the terms of the offering of common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part is the accompanying prospectus, which provides more general information, some of which may not apply to the common stock. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference therein, on the other hand, you should rely on the information in this prospectus supplement.

You should rely only on the information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus or any free writing prospectus. We have not, and the underwriter has not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. The information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus is current as of the date such information is presented, regardless of the time of delivery of this prospectus supplement or of any sale of the shares. Our business, financial condition, results of operations and prospects may have changed since those dates. It is important for you to read and consider all information contained in this prospectus supplement and the accompanying prospectus, including the documents incorporated by reference herein and therein, in making your investment decision. You should also read and consider the information in the documents we have referred you to in the sections entitled Where You Can Find More Information and Incorporation of Certain Information By Reference below.

This prospectus supplement and the information incorporated herein by reference include trademarks, services marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus supplement or any related free writing prospectuses are the property of their respective owners.

Unless the context otherwise requires, the terms we, our, us, our company, and Resonant refer to Resonant Inc. and its subsidiaries.

SUMMARY

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement or the accompanying prospectus. Because it is a summary, it does not contain all of the information that you should consider before investing in the shares. You should read this entire prospectus supplement and the accompanying prospectus carefully, including the Risk Factors, and the financial statements and other information incorporated by reference in this prospectus supplement and the accompanying prospectus.

Resonant Inc.

Resonant is a late-stage development company that has created an innovative software, intellectual property, or IP, and services platform that has the ability to increase designer efficiency, reduce the time to market and lower unit costs in the designs of filters for radio frequency, or RF, front-ends for the mobile device industry. The RF front-end, or RFFE, is the circuitry in a mobile device responsible for analog signal processing and is located between the device s antenna and its digital circuitry. The software platform we are developing is based on fundamentally new technology that we call Infinite Synthesized Networks®, or ISN®, to configure and connect resonators, the building blocks of RF filters. Filters are a critical component of the RF front-end used to select desired radio frequency signals and reject unwanted signals. Our ISN® platform allows us to develop unique, custom designs that address the increasing complexity of the RFFE due to carrier aggregation (the combining of multiple frequencies into a single data stream to increase throughput through higher data rates), or CA, by both reducing the size of the filter and improving performance. Our goal is to utilize our ISN® platform to support our customers in reducing their time to develop complex filter and module designs, to access new classes of filter designs, and to do it more cost effectively.

We are commercializing our technology through the creation of filter designs that address the problems in the high growth RFFE industry created by the growing number of frequency bands in mobile devices. The worldwide adoption of Long Term Evolution, or LTE, as the global standard, and the use of mobile devices to access the Internet, has resulted in massive proliferation of frequency bands which, when combined with CA for higher data rates and multiple input multiple output, or MIMO, has resulted in an ever-increasing number and complexity of filters in the RFFE. We have developed and continue to expand a series of single-band designs for frequency bands presently dominated by larger and more expensive bulk acoustic wave, or BAW, filters. We are also developing multiplexer filter designs for two or more bands to address the CA requirements of our customers. We are using our ISN® platform to efficiently integrate these designs into RF modules for our module customers. Finally, we are developing unique filter designs, enabled by ISN®, to replace multiple filters and associated componentry for many bands, with higher performance. Currently, we are leveraging ISN® to develop these designs targeted for either the Surface Acoustic Wave (SAW) or Temperature Compensated, Surface Acoustic Wave (TC-SAW) manufacturing processes. In order to succeed, we must convince RFFE suppliers that our filter designs can significantly reduce the size and cost of their products.

We believe licensing our designs is the most direct and effective means of validating our ISN® platform and related IP libraries to address this rapidly growing market. Our target customers make part or all of the RFFE. We intend to retain ownership of our designs, and we expect to be compensated through license fees and royalties based on sales of RFFE filters that incorporate our designs. We currently do not intend to manufacture or sell any physical products or operate as a contract design company developing designs for a fee.

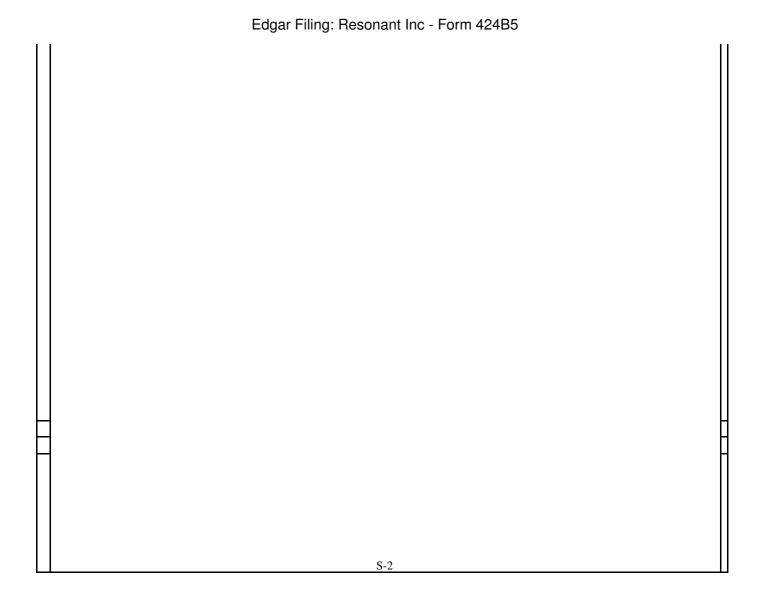
We were incorporated in Delaware in January 2012. Our principal executive offices are located at 110 Castilian Drive, Suite 100, Goleta, California 93117, and our telephone number at this location is (805) 308-9803. Our website address is www.resonant.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus.
S-1

	The Offering
Issuer	Resonant Inc.
Common stock offered by us	shares
Common stock to be outstanding	
after the offering	shares
Use of Proceeds	We currently anticipate that the net proceeds from the sale of the common stock will be used for working capital and other general corporate purposes. See Use of Proceeds on page S-24.
Risk Factors	See Risk Factors beginning on page S-3 for a discussion of factors you should carefully consider before deciding to invest in shares of our common stock.
NASDAQ Capital Market symbol	RESN

The number of shares of our common stock to be outstanding after the offering assumes no exercise of the underwriter s over-allotment option and is based on 19,954,007 shares of our common stock outstanding as of March 20, 2018 and excludes:

- 1,108,277 shares of our common stock issuable upon exercise of outstanding options granted under our equity incentive plans at a weighted average exercise price of \$4.89 per share;
- 1,557,198 shares of our common stock issuable upon the release of outstanding restricted stock units granted under our equity incentive plans with a weighted average grant date fair value of \$5.11 per share; and
- 2,572,601 shares of our common stock available for issuance or future grant pursuant to our equity incentive plan; and
- 3,465,256 shares of our common stock issuable upon exercise of outstanding warrants at a weighted average exercise price of \$4.52 per share.

Unless otherwise stated, the information in this prospectus supplement assumes that the underwriter has not exercised its option to purchase additional shares from us to cover over-allotments.



RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following risks and other information included or incorporated by reference in this prospectus supplement and the accompanying prospectus, including our historical financial statements and related notes, before deciding whether to purchase shares of our common stock. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations. The occurrence of any of the following risks could materially and adversely harm our business, financial condition or prospects. The trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment.

Risks Relating to Our Business and Our Industry

We may require additional capital to continue operations in the future, which capital may not be available on terms acceptable to us, if at all.

Our consolidated financial statements account for the continuation of our business as a going concern. We are subject to the risks and uncertainties associated with a new business. Our principal source of liquidity as of December 31, 2017 consists of existing cash and cash equivalents of \$19.5 million. During the year ended December 31, 2017, we used \$15.6 million of cash and investments for operating activities, the purchase of property and equipment, and expenditures for patents. Due to these conditions, along with planned growth, substantial doubt exists as to our ability to continue as a going concern. After evaluation of these conditions, we believe our current resources will provide sufficient funding for planned operations into the second half of 2018. If necessary, we will seek to raise additional capital from the sale of equity securities or the incurrence of indebtedness to allow us to continue operations. There can be no assurance that additional financing will be available to us on acceptable terms, or at all. Additionally, if we issue additional equity securities to raise funds, whether to existing investors or others, 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. Additionally, we may be limited as to the amount of funds we can raise pursuant to SEC rules and the continued listing requirements of NASDAQ. If we cannot raise needed funds, we might be forced to make substantial reductions in our operating expenses, which could adversely affect our ability to implement our business plan and ultimately our viability as a company. These consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might result from this uncertainty.

We have a history of operating losses and we may never achieve or maintain profitability or positive cash flows.

We have a limited operating history and utilize planned milestones for investors to evaluate our progress. We have generated minimal revenues and we have a history of losses from operations with an accumulated deficit as of December 31, 2017 of \$67.8 million. Our operations have been funded with initial capital contributions, proceeds from the sale of equity securities and debt. We intend to continue to make investments to support our business growth and may require additional funds to respond to business challenges, including the need to refine existing technology, develop new technology, improve our operating infrastructure or acquire complementary businesses and technologies. Our ability to generate revenues and achieve profitability and, ultimately, positive cash flows, may depend on whether we can obtain additional capital when we need it and will depend on whether we continue to refine our technology and find additional customers who will license our designs. There can be no assurance that we will ever generate adequate revenues to achieve profitability and positive cash flows.

Our business model is based on licensing filter designs, which is unproven. Historically, our target customers have relied on their own filter designs or purchased finished filters from a manufacturer, and have not licensed third-party designs. Consequently, we may not succeed in our licensing strategy, which would require us to adopt a new business model and would have a material adverse effect on our potential for generating revenues and potentially threaten our viability.

Our business model is based on licensing our proprietary filter designs. We do not intend to manufacture or sell any physical products or operate as a contract design company developing designs for a fee. We believe licensing our designs is the most direct and effective means of delivering our solutions to the market. We intend to retain ownership of our designs and charge royalties based on sales of filters and RFFE modules that incorporate our designs.

Our target customers either make part or all of the RFFE. These customers have historically used their own filter designs or purchased finished filters from a manufacturer. Our business model is new to the filter industry, and although we have encountered some resistance to our licensing strategy, initial royalty payments have been received. The failure to scale our business model would have a material adverse effect on our potential for generating revenues and potentially threaten our viability.

We may not be able to complete some of our designs because they do not meet our customers expectations. Even if we succeed in developing a design that meets all of a customer s requirements, the customer could decline to use our design in their products. Further, our customer s product could fail in the marketplace. Any of these events would have a material adverse effect on our business and potentially threaten our viability.

We are currently working on filter designs for customers that have given us stringent performance specifications. In addition, some of our customers have shipped pre-production sample filter quantities of our designs to their customers for further evaluation. In the case of a few of our early designs, mass production has commenced. However, the filter qualification process is demanding and some designs will not result in volume production. If successfully developed and selected by our customer, our designs will compete against other technologies for inclusion in our customers products. Our customers final products will then compete against other products and technologies for inclusion in mobile devices in the marketplace. There can be no assurance that we can complete our designs, that our final designs will have acceptable performance and meet our customers specifications, or if our pre-production sample filter shipments will be selected for production. Even if our filter designs have acceptable performance, there are a number of other considerations influencing the customer's decision whether to use our design, such as packaging type and manufacturing cost, many of which are beyond our control. The decision to use our designs is solely within our customers discretion. Further, if our filter design is selected by a customer for inclusion in its design or product, there is no guarantee that the customer s design or product will be selected for inclusion in mobile devices. The failure of a significant number of our designs to be selected at the design stage or the device stage would have a material adverse effect on our business and potentially threaten our viability.

We are not a filter manufacturer, and thus we are reliant on filter fabricators or manufacturers to manufacture filters from our designs. For some of our customers that will not manufacture our design themselves, we may be required to have our customer approve the filter manufacturer, and the customer will not license our design unless the manufacturer can demonstrate the ability to economically produce the duplexer design in large volumes.

Even though some of our designs have reached commercialization on a small scale, and we believe our future completed designs can be manufactured using existing technology, we remain dependent on the manufacturer's filter fabrication processes and capabilities for our filter designs. Even with a fully compliant duplexer design, the customer may not license our design unless the manufacturer can demonstrate the ability to economically produce the design in large volumes. We do not have any control over the manufacturer. We cannot assure you that the manufacturer will have the necessary technology, skills and resources to successfully manufacture of our design in commercial quantities.

Our designs will be complex and may prove difficult to manufacture in commercial quantities. We will be relying on our customers and filter fabricators or manufacturers to build our designs. Our business could fail if they encounter difficulties manufacturing our designs in commercial quantities.

We continue to develop complex RF designs, which is inherently challenging. Only a few of our designs are currently in production. We rely on our customers and filter fabricators or manufacturers to manufacture our designs. They will need to manufacture our designs in commercial quantities at an acceptable cost, and have little or no control over the manufacturing process. They must also operate and maintain sophisticated manufacturing equipment, and equipment failures can have adverse consequences on production volumes, yields and schedules. They may encounter difficulties in scaling up production of our designs, including problems with quality control, raw material and component supply shortages, low manufacturing yields, increased costs, shortages of qualified personnel and/or difficulties associated with compliance with regulatory requirements. Any of these problems may adversely affect the timing and amount of our future revenues. Additionally, if our customers and their suppliers encounter difficulties manufacturing our designs in commercial quantities, our business could fail.

Our business success relies on manufacturers to fabricate our designs, and market acceptance of our designs could be adversely affected if the manufacturers decline to manufacture our designs.

We are a filter design company and will not commercially manufacture any products. Our business model is to license our designs to customers, who will manufacture our designs themselves or rely on third party manufacturers, commonly referred to as foundries, to fabricate our designs for integration into the customer's overall product. Many foundries offer potentially competitive filter technology as part of their standard product line or offer the services of in-house design teams which may consider us competition. In this case, our customers may face resistance by their foundries to manufacture our designs. We believe the economics can be structured to make it attractive to the foundries to manufacture our designs for our potential customers but we cannot be assured of the success in convincing them of the value of manufacturing our designs. The reluctance of foundries to manufacture our designs could adversely affect the market acceptance of our designs.

We develop and test our designs under laboratory conditions using low volume production samples. Once in production, our designs may not perform as well, or prove unreliable, due to manufacturing variations and operating conditions. This could adversely affect our business.

We develop and test our designs under laboratory conditions using low volume production samples. The transition from product development to commercial production requires high volume manufacturing which introduces product variations. These variations can adversely affect performance and reliability. Similarly, our designs may not perform as well or prove sufficiently reliable under actual operating conditions. This could adversely affect our business.

We perform failure analysis and reliability testing of our customers parts that use our designs. If our analysis and testing prove to be faulty and our customers rely upon such information, our reputation could be damaged and our future business and revenues could be adversely affected.

We perform failure analysis and reliability testing of our customers parts. In the event our analysis and testing prove to be faulty or insufficient, including due to failure of our laboratory equipment or human error, and our customers rely upon the results we provide, our reputation may be damaged, and customers may be reluctant to utilize our services or license our designs. This could harm our ability to attract customers and negatively impact our financial results, and may result in claims against us by our customers or others.

We have completed and continue to actively work on filter designs with, and expect to derive all of our revenues from, a small number of customers. Our failure to retain or expand customer relationships will have an adverse effect on our revenues.

We have completed and are currently working on filter designs with, and expect to derive our revenues from, a small number of customers. Our failure to retain or expand customer relationships, or any problems we experience in collecting receivables from them, would harm our financial condition and results of operations. Additionally, our industry is experiencing consolidation among suppliers and manufacturers of RF front-end components and modules, including activities of module suppliers who vertically integrate by acquiring component suppliers and fabs. This may lead to fewer customers, reduced demand for our designs and replacement of our designed products by the consolidated company. Any of these possibilities could adversely affect our business, financial condition and results of operations.

We are a solutions company, providing designs based on our ISN® software platform, intellectual property and design team. We license our designs to manufacturers of RFFEs, RFFE sub-systems and components for mobile devices. If our designs do not achieve widespread market acceptance among RFFE manufacturers, we will not be able to generate the revenue necessary to support our business.

Achieving additional acceptance among RFFE manufacturers of our designs will be crucial to our continued success. We have a limited history of marketing designs and we may fail to generate significant interest in our designs. These and other factors may affect the rate and level of market acceptance, including:

- our royalty fees and the cost of our designed filters relative to other competing designs and technologies;
- perception by RF front-end manufacturers and mobile device manufacturers;
- press and blog coverage, social media coverage, and other publicity and public relations factors which are not within our control; and
- regulatory developments related to manufacturing, marketing and selling our designs.

If we are unable to achieve or maintain market acceptance, our business would be harmed.

The complexity of our designs could result in unforeseen delays or expenses from latent defects that could reduce the market acceptance for our designs, damage our reputation and adversely affect our future revenues and operating costs.

We are developing highly complex filters designs using a new approach. We have produced only a limited number of designs that have gone into commercial production and therefore cannot be certain our methods and testing procedures are adequate to detect latent design defects. If any of our designs contain latent defects, we may be unable to correct these problems. Consequently, our reputation may be damaged and

customers may be reluctant to buy our designs, which could harm our ability to attract customers and negatively impact our financial results. These problems may also result in claims against us by our customers or others.

Failures in the products or services of our customers, including those resulting from defects or errors, could result in decreased sales and harm our business.

Our success depends in large part on the demand for mobile wireless devices and other products that incorporate our proprietary filter designs. Our customers products are inherently complex and may contain defects or errors unrelated to our designs that are detected only when the products are in use. Any defects or errors in the products of our customers could result in product recalls or the discontinuation of those products, which could have an adverse impact on our operating results due to a delay or decrease in demand for our designs. Further, security failures, defects or errors in mobile wireless devices, such as the issues with the Galaxy Note 7 that caused Samsung to discontinue that product, have led to increased scrutiny of component suppliers. If our customers do not perceive our designs, or if mobile device manufacturers do not perceive the products of our customers, to be of high quality, or if we or our customers are unable or unwilling to comply with heightened quality assurance requirements of mobile device manufacturers, we may be unsuccessful in having our designs incorporated into finished products.

Our designs may not gain widespread acceptance unless they offer greater benefits to our customers than offered by competing RF filter designs.

RF front-end manufacturers are primarily concerned with the cost, size and performance of RF filters. Our designs may not gain widespread acceptance unless, as compared to competing RF filter designs, they are smaller in size, can be fabricated at reduced cost or designed in less time, or improve performance. There can be no assurance that our SAW or TC-SAW filter designs will cost sufficiently less to manufacture than existing BAW filters, or can be designed in less time, to prove economically attractive to RF front-end manufacturers or that our filter designs will be smaller in size or perform better.

Our technologies have only limited verification in practice or on a commercial scale.

Our technologies have been subject to only limited testing on a commercial scale. There is no assurance that we will be able to fully develop designs that will transition into production or license our proposed designs on a timely basis, or at all.

Our development cycles are long and our final designs may no longer remain competitive upon completion.

We operate in an industry which is subject to rapidly evolving technologies. Because our designs are expected to have long development cycles, we must anticipate changes in the marketplace and the direction of technological innovation and customer demands. To compete successfully, we will need to demonstrate the advantages of our designs and technologies.

Our industry is subject to intense competition and rapid technological change, which may result in designs, products or new solutions that are superior to our designs under development. If we are unable to anticipate or keep pace with changes in the marketplace and the direction of technological innovation and customer demands, our designs may become less useful or obsolete and our operating results will suffer.

We operate in an industry which is subject to intense and increasing competition. Our future success will depend in large part on our ability to establish and maintain a competitive position in current and future technologies. Rapid technological development may render our designs and technologies obsolete. Many of our competitors have or may have greater engineering, sales, marketing, operational, corporate and financial resources, and more experience in research and development than we have. We cannot assure you that our competitors will not succeed in developing or marketing technologies or products that are more effective or commercially attractive than our designs or that would render our technologies and designs obsolete. We may not have or be able to raise or develop the financial resources, technical expertise, or support capabilities to compete successfully in the future. Our success will depend in large part on our ability to maintain a competitive position with our technologies.

If our principal end markets fail to grow or experience declines, our net revenue may not meet our business plan expectations.

Our initial designs are being incorporated into mobile wireless devices. Accordingly, demand for our designs is dependent on the ability of mobile wireless device manufacturers to successfully sell wireless devices that incorporate our designs. We cannot be certain whether these manufacturers will be able to create or sustain demand for their wireless devices that contain our designs or how long they will remain competitive in their business, if at all. The success of these mobile wireless device manufacturers and the demand for their wireless devices can be affected by a number of factors, including, but not limited to:

•	market acceptance of their mobile wireless devices that contain our designs;
•	the impact of slowdowns or declines in sales of mobile wireless devices in general;
•	their ability to design products with features that meet the evolving tastes and preferences of consumers;
•	fluctuations in foreign currency;
•	relationships with wireless carriers in particular markets;
•	the implementation of, or changes to, mobile wireless device certification standards and programs;
•	technological advancements in the functionality and capabilities of mobile wireless devices;
•	the imposition of restrictions, tariffs, duties, or regulations by U.S. or foreign governments on mobile wireless device manufacturers
•	failure to comply with governmental restrictions or regulations;
•	cost and availability of components for their products; and

inventory levels in the sales channels into which mobile wireless device manufacturers sell their products.

Our intellectual property rights may not be adequate to protect our business

Our success depends significantly on our ability to obtain, maintain and protect our proprietary rights to the technologies used in products incorporating our technologies. We currently hold patents related to various elements of our technology and we also have patent applications currently pending before the United States Patent Office and other patent offices around the world. No assurances can be given that any patent will be issued on our pending patent applications or any other application that we may file in the future or that, if such patents are issued, they will be sufficiently broad to adequately protect our technology. In addition, we cannot assure you that any patents that may be issued to us will not be challenged, invalidated, or circumvented.

Our proprietary rights may be difficult to enforce, which could enable others to copy or use aspects of our intellectual property without compensating us, thereby eroding our competitive advantages and harming our business.

Our success depends, in part, on our ability to protect proprietary methods and technologies that we develop under the intellectual property laws of the United States, so that we can prevent others from using our inventions and proprietary information. If we fail to protect our intellectual property rights adequately, our competitors might gain access to our technology, and our business might be adversely affected. We rely on trademark, copyright, mask works, trade secret and patent laws, confidentiality procedures and contractual provisions to protect our proprietary methods and technologies. We currently hold patents and have pending patent applications related to our technology solutions. Valid patents may not be issued from our pending applications, and the claims allowed on any issued patents may not be sufficiently broad to protect our technology or offerings and services. Any patents we currently hold or that may be issued to us in the future may be challenged, invalidated or circumvented, and any rights granted under these patents may not actually provide us with adequate defensive protection or competitive advantages. Additionally, the process of obtaining patent protection is expensive and time-consuming, and we may not be able to prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner.

Policing unauthorized use of our technology is difficult. Additional uncertainty may result from changes to intellectual property legislation enacted in the United States, including the recent America Invents Act, and other countries and from interpretations of the intellectual property laws of the United States and other countries by applicable courts and agencies. In addition, the laws of some foreign countries may not be as protective of intellectual property rights as those of the United States, and mechanisms for enforcement of our proprietary rights in such countries may be inadequate. From time to time, legal action by us may be necessary to enforce our intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement. Such litigation could result in substantial costs and the diversion of limited resources and could negatively affect our business, operating results and financial condition. If we are unable to protect our proprietary rights (including aspects of our technology platform) we may find ourselves at a competitive disadvantage to others who have not incurred the same level of expense, time and effort to create and protect their intellectual property.

Furthermore, we acquired some of the patents we currently hold from Superconductor Technologies, Inc., or STI. Although we believe we have obtained valid assignments of patent rights from STI and STI has obtained valid assignments of patent rights from all inventors, if an inventor did not adequately assign his or her patent right to STI or STI did not adequately assign its patent rights to us, a third party could obtain a license to the patent from such inventor or STI. This could preclude us from enforcing the patent against such third party. In addition, because we acquired our patents from STI, some of the inventors of our patents are not our employees and they are not obligated to assist us in prosecuting, maintaining, defending and enforcing such patents. Without the cooperation of the inventors of our patents, it may be difficult for us to prevail in any legal action involving the intellectual property rights under our patents. Additionally, the inventors may have information, trade secrets and know-how learned while at STI that is not our property and if disclosed could provide competitors with insights that allow them to invent around our patented technology.

Accordingly, despite our efforts, we may be unable to obtain adequate patent protection, or to prevent third parties from infringing upon, misappropriating or inventing around our intellectual property.

We may be subject to intellectual property rights claims by third parties, which are extremely costly to defend, could require us to pay significant damages and could limit our ability to use certain technologies.

Third parties may assert claims of infringement of intellectual property rights in proprietary technology against us for which we may be liable or have an indemnification obligation. Any claim of infringement by a third party, even those without merit, could cause us to incur substantial costs defending against the claim and could distract our management from our business.

Although third parties may offer a license to their technology, the terms of any offered license may not be acceptable and the failure to obtain a license or the costs associated with any license could cause our business, results of operations or financial condition to be materially and adversely affected. In addition, some licenses may be non-exclusive, and therefore our competitors may have access to the same technology licensed to us. Alternatively, we may be required to develop non-infringing technology, which could require significant effort and expense and ultimately may not be successful. Furthermore, a successful claimant could secure a judgment or we may agree to a settlement that prevents us from licensing certain designs or performing certain services or that requires us to pay substantial damages, including treble damages if we are found to have willfully infringed the claimant s patents or copyrights, royalties or other fees. Any of these events could seriously harm our business, operating results and financial condition.

We may be unsuccessful in monetizing our intellectual property portfolio.

We have dedicated substantial resources to the development and protection of technology innovations essential to our business, and we expect these activities to continue for the foreseeable future. We also intend to aggressively pursue monetization avenues for our intellectual property portfolio, potentially including licensing, royalty or other revenue-producing arrangements. However, our revenues are currently generated in part by licensing our technology and we may never be successful in generating a revenue stream from our intellectual property, in which case our investments of time, capital and other resources into our intellectual property portfolio may not provide adequate, or any, returns.

Our customer agreements include indemnity provisions and may expose us to substantial liability for intellectual property infringement and other losses.

Our customer agreements include indemnification provisions under which we agree to indemnify third parties for losses suffered or incurred as a result of claims of intellectual property infringement, damages caused by us to property or persons, or other liabilities relating to or arising from our designs, services, or other contractual obligations. The term of these indemnity provisions generally survives termination or expiration of the applicable agreement. Large indemnity payments could harm our business, operating results and financial condition.

We use highly specialized proprietary software as well as commercially available software pursuant to annual licenses, and the failure of this software or inability to renew any of these licenses could adversely affect our ability to design new RF filters and thus our potential for generating revenues.

We have developed and use highly specialized proprietary computer software in our design process. The failure of any of this software to perform as expected could adversely affect our ability to produce new RF filter designs and thus our potential for generating revenues. In addition to our proprietary software, we also use highly specialized but commercially available computer software in our design process. We do not own this software and use it under the terms of licenses. These licenses are made available to us at prices and on terms generally available to any customer. If we were unable to renew any of these software licenses, we would have to locate or develop alternative software. We cannot assure you that suitable alternative software would be available on commercially reasonable terms or could be developed by us at reasonable cost. The loss of any one of these software licenses could adversely affect our ability to produce new RF filter designs and thus our potential for generating revenues.

Our limited operating history makes it difficult to evaluate our business and prospects and may increase the risks associated with your investment.

We have only a limited operating history upon which our business and future prospects may be evaluated. We have encountered and will continue to encounter risks and difficulties frequently experienced by companies in rapidly developing and changing industries, including challenges related to recruiting, integrating and retaining qualified employees; making effective use of our limited resources; achieving market acceptance of our existing and future solutions; competing against companies with greater financial and technical resources; and developing new solutions. Our current operational infrastructure may require changes for us to scale our business efficiently with additional technical personnel and effectively to keep pace with demand for our solutions, and achieve long-term profitability. If we fail to implement these changes on a timely basis or are unable to implement them effectively, our business may suffer. We cannot assure you that we will be successful in addressing these and other challenges we may face in the future. As a company in a rapidly evolving industry, our business prospects depend in large part on our ability to:

• build a reputation for a superior solution and create trust and long-term relationships with our customers;

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•	distinguish ourselves from competitors in our industry;
•	develop and offer competitive technologies that meet our customers needs as they change;
•	respond to evolving industry standards and government regulations that impact our business;
•	expand our business internationally; and
•	attract, hire, integrate and retain qualified and motivated employees.
	nable to meet one or more of these objectives or otherwise adequately address the risks and difficulties that we face, our business marevenue may decline and we may not be able to achieve growth or long-term profitability.
	gement team and financial reporting group is limited in size and experience which may impact the implementation and ttion of financial and reporting controls and procedures.
manageme controls ar there may	our management team makes certain representations about the financial and reporting controls and procedures in our SEC filings, ou ent team has limited experience in implementing and maintaining our operations and our financial processes. Financial and reporting and procedures implemented and maintained by our management team, now or in the future, may not be adequate, with the result that be substantial deficiencies that will need remediation in the future. If there are inadequate controls and procedures, our financial and our reporting may be inaccurate or untimely.
-	f the services of our key management and personnel or the failure to attract additional key personnel could adversely affect our perate our business.
intention of technical, the highly	one or more of our current officers or key employees could severely and negatively impact our operations. We have no present of obtaining key-man life insurance on any of our executive officers or management. Additionally, competition for highly skilled managerial and other personnel is intense. As our business develops, we might not be able to attract, hire, train, retain and motivate skilled managers and employees we need to be successful. If we fail to attract and retain the necessary technical and managerial our business may not grow, may suffer and might fail.
We may h	ave difficulty managing growth in our business.

Because of our small size, growth in accordance with our business plan, if achieved, will place a significant strain on our financial, technical, operational and management resources. As we expand our activities, there will be additional demands on these resources. The failure to continue to upgrade our technical, administrative, operating and financial control systems or the occurrence of unexpected expansion difficulties, including issues relating to our research and development activities and retention of experienced scientists, managers and engineers, could have a material adverse effect on our business, financial condition and results of operations and our ability to timely execute our business plan. If we are unable to implement these actions in a timely manner, our results may be adversely affected.

We plan to relocate our corporate headquarters and design servers, which could adversely affect our operations, operating results and financial condition, and may cause us to experience disruptions to our business.

In 2018, we plan to relocate our corporate headquarters in order to keep pace with our growth. In addition, we plan to relocate our design servers to a new dedicated third-party facility with improved security and utilities. The planned relocation may require significant management time and effort which would otherwise be devoted to focusing on ongoing business operations and other initiatives and opportunities. Moving facilities could negatively impact our ability to meet design schedules, and the expected benefits of the relocation may not be fully realized due to associated disruption to our operations and personnel. Any such delays or disruptions could have an adverse effect on our business, results of operations or financial condition.

Our worldwide operations are subject to political, legal and economic risks and natural disasters, which could have a material adverse effect on us.

Our customers are located around the world, including in the United States and Asia, and we expect that international sales will comprise a significant portion of total sales in the future. In addition, products utilizing our designs will be produced, assembled and tested at third-party manufacturing facilities located primarily in Asia. Consequently, we are subject to political, legal and economic risks associated with operations in foreign countries, including, without limitation:

•	expropriation;
•	changes in a specific country s or region s political or economic conditions;
•	changes in tax laws, trade protection measures and import or export licensing requirements;
•	difficulties in protecting our intellectual property;
•	difficulties in managing staffing and exposure to different employment practices and labor laws;
•	changes in foreign currency exchange rates;
•	restrictions on transfers of funds and other assets of our subsidiaries between jurisdictions;
•	changes in freight and interest rates;
•	disruption in air transportation between the United States and overseas facilities;
•	loss or modification of exemptions for taxes and tariffs; and

• compliance with U.S. laws and regulations related to international operations, including export control and economic sanctions laws and regulations and the Foreign Corrupt Practices Act.

In addition, our worldwide operations (or those of our business partners) could be subject to natural disasters such as earthquakes, tsunamis, flooding, typhoons and volcanic eruptions that disrupt manufacturing or other operations. For example, our Goleta and Burlingame operations are located near major earthquake fault lines in California. Any conflict or uncertainty in the countries in which we operate, including public health issues, safety issues, natural disasters, disruptions of service from utilities, nuclear power plant accidents or general economic or political factors, could have a material adverse effect on our business. Any of the above risks, should they occur, could result in an increase in the cost of components, production delays, general business interruptions, delays from difficulties in obtaining export licenses for certain technology, tariffs and other barriers and restrictions, longer payment cycles, increased taxes, restrictions on the repatriation of funds and the burdens of complying with a variety of foreign laws, any of which could ultimately have a material adverse effect on our business.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our operating results could fall below the expectations of securities analysts and investors, resulting in a decline in our stock price.

The preparation of financial statements in conformity with generally accepted accounting principles, or GAAP, requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. Our operating results may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our operating results to fall below the expectations of securities analysts and investors, resulting in a decline in our stock price. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to the fair values of equity instruments, other financial instruments and income taxes.

Our ability to use our net operating loss carryforwards (NOLs) and other tax attributes to offset future taxable income may be limited.

We have significant NOLs and R&D tax credits available to offset our future United States federal and state taxable income. Under Sections 382 and 383 of Internal Revenue Code of 1986, as amended, if a corporation undergoes an ownership change, the corporation's ability to use its pre-change NOLs and other pre-change tax attributes, such as R&D tax credits, to offset its post-change income and taxes may be limited. In general, an ownership change occurs if there is a cumulative change in our ownership by 5% shareholders that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. If we experience ownership changes as a result of future transactions in our stock, then we may be further limited in our ability to use our NOLs and other tax assets to reduce taxes owed on the net taxable income that we earn. Any such limitations on the ability to use our NOLs and other tax assets could adversely impact our business, financial condition and operating results. In addition, California and certain states have suspended use of NOLs for certain taxable years and other states are considering similar measures. As a result, we may incur higher state income tax expense in the future. Depending on our future tax position, continued suspension of our ability to use NOLs in states in which we are subject to income tax could have an adverse impact on our operating results and financial condition.

Changes in U.S. tax laws and regulations, including the Tax Cuts and Jobs Act of 2017, may have a material adverse effect our business, cash flow, operating results, and financial condition.

Changes in tax laws and regulations, or changes in the interpretation of tax laws and regulations by federal or state authorities, may have a material adverse effect our business, cash flows, operating results or financial condition. The federal government recently enacted the Tax Cuts and Jobs Act of 2017, which contains many significant changes to federal income tax laws, including a reduction to the U.S. Corporate income tax rate. The reduction in the tax rate impacted our deferred tax assets by \$6.8 million, which would have been recognized as tax expense if we did not have a full valuation allowance recorded against our deferred tax assets. Changes in corporate tax rates and the deductibility of expenses contained in the 2017 Tax Act or other tax reform legislation could have a material impact on the future value of our deferred tax assets, could result in significant one-time costs or expenses in the current or future taxable years, and could increase our future U.S. tax expense. In addition, foreign governments or U.S. states may enact tax laws in response to the 2017 Tax Act that could result in further changes to taxation applicable to us and materially affect our operating results and financial condition.

Security breaches and improper access to or disclosure of our proprietary information, or other hacking attacks on our systems, could adversely affect our business.

Our industry is prone to cyber-attacks, with third parties seeking unauthorized access to our proprietary information and technology. Computer malware, viruses, and hacking and phishing attacks by third parties have become more prevalent in our industry and may occur on our systems in the future. We believe such attempts are increasing in number and in technical sophistication, and in some instances we may be unable to anticipate these techniques or to implement adequate preventative measures. Additionally, we may be unaware of an incident or its magnitude and effects. Although we have developed systems and processes that are designed to protect our proprietary information and to prevent other cybersecurity breaches, we cannot guarantee that such measures will provide absolute security.

Any failure to prevent or mitigate security breaches and improper access to or disclosure of our proprietary information could result in the loss or misuse of such proprietary information, which could harm our business and diminish our competitive position. Such attacks may also create system disruptions or cause shutdowns. Publicity about vulnerabilities and attempted or successful incursions could damage our reputation with customers and reduce demand for our products and services.

Affected private parties or government authorities could initiate legal or regulatory actions against us in connection with any security breaches, which could cause us to incur significant expense and liability or result in orders or consent decrees forcing us to modify our business practices. Any of these events could have a material and adverse effect on our business, reputation, and operating results.

If we choose to acquire new businesses, products or technologies, we may experience difficulty in the identification or integration of any such acquisition, and our business may suffer.

Our commercial success depends on our ability to continually enhance and broaden our product offerings in response to changing customer demands, competitive pressures and technologies. Accordingly, we may in the future pursue the acquisition of complementary businesses, products or technologies instead of developing them ourselves. We do not know if we will be able to identify or complete any future acquisitions, or whether we will be able to successfully integrate any acquired business, product or technology or retain key employees. Integrating any business, product or technology we acquire could be expensive and time consuming, disrupt our ongoing business and distract our management. Moreover, we may fail to realize the anticipated benefits of any acquisition. If we are unable to integrate any acquired businesses, products or technologies effectively, our business will suffer. In addition, any amortization or charges resulting from acquisitions could adversely affect our operating results.

Risks Relating to this Offering, the Securities Markets and Ownership of Our Common Stock

Purchasers in this offering will experience immediate dilution in the net tangible book value of their investment.

Purchasers of our common stock in this offering will experience an immediate dilution in the net tangible book value of the common stock purchased in this offering because the price per share of common stock in this offering is substantially higher than the net tangible book value of each share of common stock outstanding immediately after this offering. Our net tangible book value as of December 31, 2017 was approximately \$18.5 million, or approximately \$0.95 per share of common stock. See Dilution in this prospectus supplement for a more detailed discussion of the dilution you will incur if you purchase shares in this offering.

Our management will have broad discretion over the use of the proceeds we receive in this offering and might not apply the proceeds in ways that increase the value of your investment.

Our management will have broad discretion to use our net proceeds from this offering and you will be relying on the judgment of our management regarding the application of these proceeds. Our management might not apply our net proceeds of this offering in ways that increase the value of your investment. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering.

If we raise additional capital in the future, your ownership in us could be diluted.

Any issuance of equity we may undertake in the future to raise additional capital could cause the price of our common stock to decline, or require us to issue shares at a price that is lower than that paid by holders of our common stock in the past, which would result in those newly issued shares being dilutive. If we obtain funds through a credit facility or through the issuance of debt or preferred securities, these securities would likely have rights senior to your rights as a common shareholder, which could impair the value of our common stock.

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Our business could be negatively affected as a result of actions of activist stockholders, and such activism could impact the trading value of our securities.

Stockholders may, from time to time, engage in proxy solicitations or advance stockholder proposals, or otherwise attempt to effect changes and assert influence on our board of directors and management. While we strive to maintain constructive, ongoing communications with all of our stockholders, and welcome their views and opinions with the goal of enhancing value for all stockholders, activist campaigns that contest or conflict with our strategic direction or seek changes in the composition of our board of directors could have an adverse effect on our operating results and financial condition. A proxy contest would require us to incur significant legal and advisory fees, proxy solicitation expenses and administrative and associated costs and require significant time and attention by our board of directors and management, diverting their attention from the pursuit of our business strategy. Any perceived uncertainties as to our future direction and control, our ability to execute on our strategy, or changes to the composition of our board of directors or senior management team arising from a proxy contest could lead to the perception of a change in the direction of our business or instability which may be exploited by our competitors, result in the loss of potential business opportunities, and make it more difficult to pursue our strategic initiatives or attract and retain qualified personnel and business partners, any of which could adversely affect our business and operating results. If individuals are ultimately elected to our Board with a specific agenda, it may adversely affect our ability to effectively implement our business strategy and create additional value for our stockholders. We may choose to initiate, or may become subject to, litigation as a result of the proxy contest or matters arising from the proxy contest, which would serve as a further distraction to our board of directors and management and would require us to incur significant additional costs. In addition, actions such as those described above could cause significant fluctuations in our stock price based upon temporary or speculative market perceptions or other factors that do not necessarily reflect the underlying fundamentals and prospects of our business.

On October 6, 2017, Park City Capital, LLC, or Park City, currently a holder of approximately 5% of our outstanding common shares, announced its intention to initiate a proxy contest to elect a new board of directors at our 2018 annual meeting of shareholders. On March 6, 2018, Park City announced its nomination of six individuals for election to our board of directors. We intend to oppose the nomination of those six individuals to our board of directors. Park City s founder and chief executive officer, Michael J. Fox, is currently a member of our board of directors.

A securities class action lawsuit has been filed against us in the past, and a shareholder derivative lawsuit remains pending against us. Legal proceedings of this nature could have a material adverse effect on our business, results of operations and financial condition.

In 2015, a putative class action lawsuit and shareholder derivative lawsuit were filed against us and certain of our directors and officers. A settlement of the class action lawsuit was approved in November of 2017, and a settlement of the derivative lawsuit is pending approval by the court, with the settlement approval hearing expected to take place in April of 2018. Lawsuits of this nature may divert financial and management resources that would otherwise be used to benefit our operations. Although we denied the material allegations in the lawsuits and defended ourselves vigorously, defending the lawsuits resulted in substantial costs and, in the case of the still-pending shareholder derivative lawsuit, could result in additional costs. In addition, we may be the target of securities-related litigation in the future. Such litigation could divert our management s attention and resources, result in substantial costs, and have an adverse effect on our business, results of operations and financial condition.

We maintain director and officer insurance that we regard as reasonably adequate to protect us from potential claims; however, we cannot assure you that it will. Further, if we are subject to future litigation, the costs of insurance may increase and the availability of coverage may decrease. As a result, we may not be able to maintain our current levels of insurance at a reasonable cost, or at all, which might make it more difficult to attract qualified candidates to serve as executive officers or directors of Resonant.

The price of our common stock may be volatile and the value of your investment could decline

Technology stocks have historically experienced high levels of volatility. The trading price of our common stock may fluctuate substantially, depending on many factors, some of which are beyond our control and may not be related to our operating performance. These fluctuations could cause you to lose all or part of your investment in our common stock. Factors that could cause fluctuations in the trading price of our common stock include, but are not limited to, the following:

•	the progress, completion or failure of efforts to design our commercial products;
•	a customer decision regarding incorporation of our designs into a commercial product;
•	the loss of any customer relationship;
•	the addition of a new customer relationship;
•	mergers and acquisitions involving us, our customers or our competitors;
•	price and volume fluctuations in the overall stock market from time to time;
•	significant volatility in the market price and trading volume of technology companies in general;
•	fluctuations in the trading volume of our shares or the size of our public float;
•	actual or anticipated changes or fluctuations in our results of operations;
•	whether our results of operations meet the expectations of securities analysts or investors;
•	actual or anticipated changes in the expectations of investors or securities analysts;

	rerse effect on our business, results of operations and financial condition.
In addition, if the market for technology stocks or the stock market in general, experience a loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, results of operations or financial condition. The trading price of our common stock might also decline in reaction to events that affect other companies in our industry even if these events do not directly affect us. Securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the market price of a company s securities. Two putative class action lawsuits were filed in March 2015 against the Company and certain of our members of the Board of Directors and executives. In addition, we may be the target of securities-related litigation in the future, both related and unrelated to the existing class action lawsuits. Such litigation could divert our management s attention and resources, result in substantial costs, and have an	
•	an adverse impact on the company from any of the other risks cited herein.
•	departures of key employees; or
•	lockup releases, sales of large blocks of our common stock;
•	major catastrophic events;
•	general economic conditions and trends;
•	regulatory developments in the United States, foreign countries, or both;
•	litigation involving us, our industry, or both;

Insiders have substantial control over us, which could limit your ability to influence the outcome of key transactions, including a change of control.

Our directors, executive officers and each of our stockholders who own greater than 5% of our outstanding common stock, in the aggregate, beneficially own approximately 57% of the outstanding shares of our common stock as of February 26, 2018. As a result, these stockholders will be able to influence or control matters requiring approval by our stockholders, including the election of directors and the approval of mergers, acquisitions or other extraordinary transactions. They may also have interests that differ from yours and may vote in a manner that is adverse to your interests. This concentration of ownership may have the effect of deterring, delaying or preventing a change of control of our company, could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company and might ultimately affect the market price of our common stock.

The requirements of being a public company may strain our resources, divert our management s attention and affect our ability to attract and retain qualified board members.

As a public company, we are subject to the reporting requirements of the Exchange Act, and are required to comply with the applicable requirements of the Sarbanes-Oxley Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The NASDAQ Stock Market and other applicable securities rules and regulations. Compliance with these rules and regulations have increased our legal and financial compliance costs, made some activities more difficult, time-consuming or costly and increased demand on our systems and resources. Among other things, the Exchange Act requires that we file annual, quarterly and current reports with respect to our business and results of operations and maintain effective disclosure controls and procedures and internal controls over financial reporting. In order to maintain and, if required, improve our disclosure controls and procedures and internal controls over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management s attention may be diverted from other business concerns, which could harm our business and results of operations. Although we have already hired additional employees to comply with these requirements, we may need to hire even more employees or retain professional service providers in the future, which will increase our costs and expenses.

In addition, we expect that these new rules and regulations will make it more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee and compensation committee, and qualified executive officers.

We are an emerging growth company, and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

For so long as we remain an emerging growth company as defined in the JOBS Act, we may take advantage of certain exemptions from various requirements that are applicable to public companies that are not emerging growth companies, including not being required to comply with the independent auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We may take advantage of these exemptions for so long as we are an emerging growth company, which could be as long as five years following the completion of our initial public offering. Investors may find our common stock less attractive because we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, and our stock price may be more volatile and may decline.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. However, we chose to opt out of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates adoption of such standards is required for non-emerging growth companies. Our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

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We will remain an emerging growth company until the earliest of (a) the last day of our fiscal year during which we have total annual gross revenue of at least \$1.0 billion; (b) the last day of our fiscal year following the fifth anniversary of the completion of our initial public offering; (c) the date on which we have, during the previous three-year period, issued more than \$1.0 billion in non-convertible debt; or (d) the date on which we are deemed to be a large accelerated filer under the Securities Exchange Act of 1934, as amended, which would occur if the market value of our stock that are held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter. Once we cease to be an emerging growth company, we will not be entitled to the exemptions provided in the JOBS Act.

We are required to evaluate our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act of 2002, and any adverse results from such evaluation could result in a loss of investor confidence in our financial reports and have an adverse effect on our stock price.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we are required to furnish a report by our management on our internal control over financial reporting. Such report contains, among other matters, an assessment of the effectiveness of our internal control over financial reporting as of the end of our fiscal year, including a statement as to whether or not our internal control over financial reporting is effective. This assessment must include disclosure of any material weaknesses in our internal control over financial reporting identified by management. If we are unable to assert that our internal control over financial reporting is effective, we could lose investor confidence in the accuracy and completeness of our financial reports, which could have an adverse effect on our stock price.

Our independent registered public accounting firm is not required to formally attest to the effectiveness of our internal control over financial reporting until the later of the date we are an accelerated filer or large accelerated filer, or the date we are no longer an emerging growth company. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. Our remediation efforts may not enable us to avoid a material weakness in the future.

If securities or industry analysts do not publish research or reports about our business, or publish inaccurate or unfavorable research reports about our business, our share price and trading volume could decline.

The trading market for our common stock will, to some extent, depend on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. If one or more of the analysts who cover us should downgrade our shares or change their opinion of our business prospects, our share price would likely decline. If one or more of these analysts ceases coverage of our company or fails to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

We do not intend to pay dividends for the foreseeable future and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any dividends on our common stock. We intend to retain any earnings to finance the operation and expansion of our business, and we do not anticipate paying any cash dividends in the future. As a result, you may only receive a return on your investment in our common stock if the market price of our common stock increases.

Our charter documents and Delaware law could discourage takeover attempts and lead to management entrenchment.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent a change in control of our company. These provisions could also make it difficult for stockholders to elect directors that are not nominated by the current members of our board of directors or take other corporate actions, including effecting changes in our management. These provisions include:

- the ability of our board of directors to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by the chairman of our board of directors, the chief executive officer, the president (in the absence of a chief executive officer) or a majority vote of our board of directors, which could delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;
- the requirement for the affirmative vote of holders of at least 66-2/3% of the voting power of all of the then-outstanding shares of the voting stock, voting together as a single class, to amend the provisions of our amended and restated certificate of incorporation relating to the management of our business or our amended and restated bylaws, which may inhibit the ability of an acquirer to effect such amendments to facilitate an unsolicited takeover attempt;
- the ability of our board of directors, by majority vote, to amend our amended and restated bylaws, which may allow our board of directors to take additional actions to prevent an unsolicited takeover and inhibit the ability of an acquirer to amend our amended and restated bylaws to facilitate an unsolicited takeover attempt; and
- advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer s own slate of directors or otherwise attempting to obtain control of us.

In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time.

Risks Related to Government Regulation

Our failure to comply with U.S. laws and regulations relating to the export and import of goods, technology, and software could subject us to penalties and other sanctions and restrict our ability to license and develop our filter designs.

We are obligated by law to comply with all U.S. laws and regulations governing the export and import of goods, technology, and services, including the International Traffic in Arms Regulations, or ITAR, the Export Administration Regulations, or EAR, regulations administered by the Department of Treasury s Office of Foreign Assets Control, and regulations administered by the Bureau of Alcohol Tobacco Firearms and Explosives governing the importation of items on the U.S. Munitions Import List. Pursuant to these regulations, we are responsible for determining the proper licensing jurisdiction and export classification of our filter designs, and obtaining all necessary licenses or other approvals, if required, for exports and imports of technical data, and software, or for the provision of technical assistance or other defense services to or on behalf of foreign persons. We are also required to obtain export licenses, if required, before employing or otherwise utilizing foreign persons in the performance of our contracts if the foreign person will have access to export-controlled technical data or software. The violation of any of the applicable laws and regulations could subject us to administrative, civil, and criminal penalties.

These regulations could restrict our ability to license existing filter designs and develop new designs. For example, as a result of ITAR requirements, we are unable to supply certain products to China satellite companies or end users, which comprise a significant part of the overall satellite market. Changes in our designs or changes in export and import regulations may create delays in the introduction of our designs in international markets, prevent our customers with international operations from deploying products incorporating our designs throughout their global systems or, in some cases, prevent the export or import of product including our designs to certain countries altogether. Any change in export or import regulations or related legislation, shift in approach to the enforcement or scope of existing regulations, or change in the countries, persons, or technologies targeted by such regulations, could result in decreased use of our designs by, or our ability to export or license our designs to, existing or potential customers with international operations and decreased revenue. Additionally, failure to comply with these laws could result in sanctions by the U.S. government, including substantial monetary penalties, denial of export privileges, and debarment from government contracts.

If we fail to comply with anti-bribery laws, including the U.S. Foreign Corrupt Practices Act, or FCPA, we could be subject to civil and/or criminal penalties.

As a result of our international operations, we may be subject to anti-bribery laws, including the FCPA, which prohibits companies from making improper payments to foreign officials for the purpose of obtaining or keeping business. If we fail to comply with these laws, the U.S. Department of Justice, the Securities and Exchange Commission, or SEC, or other U.S. or foreign governmental authorities could seek civil and/or criminal sanctions, including monetary fines and penalties against us or our employees, as well as additional changes to our business practices and compliance programs, which could have a material adverse effect on our business, results of operations, or financial condition.

Developments stemming from changes in the Government administrations, both foreign and domestic, could adversely affect our business.

Changes in administration could result in changes to political, regulatory and economic laws, policies and conditions that could severely and negatively impact our business. For example, the Trump administration has expressed doubt regarding existing trade agreements, such as the North American Free Trade Agreement (NAFTA), issued an executive order announcing the United States withdrawal from the Trans-Pacific Partnership (TPP), and has raised the possibility of imposing tariffs on goods imported into the United States, including from China. Our customers are located around the world, and we expect that international sales will comprise a substantial portion of total sales in the future. In

addition, we expect that products utilizing our designs will be produced, assembled and tested at third-party manufacturing facilities located primarily in Asia. Changes in U.S. political, regulatory and economic conditions or laws and policies governing U.S. tax laws, foreign trade, manufacturing, and development and investment in the countries where we or our customers operate could adversely affect our operating results and our business.

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Changes in current laws or regulations or the imposition of new laws or regulations could impede the license of our designs or otherwise harm our business.

Wireless networks can only operate in the frequency bands, or spectrum, allowed by regulators and in accordance with rules governing how the spectrum can be used. The Federal Communications Commission, or the FCC, in the United States, as well as regulators in foreign countries, have broad jurisdiction over the allocation of frequency bands for wireless networks. We therefore will rely on the FCC and international regulators to provide sufficient spectrum and usage rules. For example, countries such as China, Japan or Korea heavily regulate all aspects of their wireless communication industries, and may restrict spectrum allocation or usage. If this were to occur, it would make it difficult for us to license our designs for use in mobile devices in that region.

FORWARD-LOOKING STATEMENTS

This prospectus supplement and the documents incorporated by reference contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, or Securities Act, and Section 21E of the Securities Exchange Act of 1934, or Exchange Act. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. These forward-looking statements include, but are not limited to, those concerning the following:

•	our ability to fund our planned operations and implement our business plan;
•	the status of filter designs under development;
•	the prospects for licensing filter designs upon completion of development;
•	plans for other filter designs not currently in development;
•	potential customers for our designs;
•	the timing and amount of future royalty streams;
•	our plans regarding the use of proceeds from our equity financings and the expected duration of our capital resources;
•	our plans regarding future financings;
•	our hiring plans;
•	the impact of our designs on the mobile device market;

•	our business strategy;
•	our intentions, expectations and beliefs regarding anticipated growth, market penetration and trends in our business;
•	the timing and success of our plan of commercialization;
•	our dependence on growth in our customers businesses;
•	our customers success in marketing products incorporating our designs to their customers;
•	the effects of market conditions on our stock price and operating results;
• with defen	our ability to maintain our competitive technological advantages against competitors in our industry and the related costs associated ding intellectual property infringement and other claims;
•	our ability to timely and effectively adapt our existing technology and have our technology solutions gain market acceptance;
•	our ability to introduce new filter designs and bring them to market in a timely manner;
•	our ability to maintain, protect and enhance our intellectual property;
• manufactu	our expectations concerning our relationships with our customers and other third parties and our customers relationships with their rers;
•	the attraction and retention of qualified employees and key personnel;
•	future acquisitions of or investments in complementary companies or technologies; and

• our ability to comply with evolving legal standards and regulations, particularly concerning requirements for being a public company and United States export regulations.

In some cases, you can identify forward-looking statements by terms such as anticipates, believes, could, estimates, expects, intends, more potential, predicts, projects, should, will, would as well as similar expressions. Forward-looking statements reflect our current views with to future events, are based on assumptions and are subject to risks, uncertainties and other important factors. We discuss many of these risks, uncertainties and other important factors in greater detail under the heading. Risk Factors contained in this prospectus supplement and any related free writing prospectus, and in our most recent annual report on Form 10-K and in our most recent quarterly report on Form 10-Q, as well as any amendments thereto reflected in subsequent fillings with the SEC. Given these risks, uncertainties and other important factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date such forward-looking statements are made. Except as required by law, we assume no obligation to update any forward-looking statements publicly, or to reflect facts and circumstances after the date of this prospectus supplement. Before deciding to purchase our securities, you should carefully read both this prospectus supplement, the accompanying prospectus and any related free writing prospectus, together with the information incorporated herein by reference as described under the heading. Incorporation of Certain Information by Reference, completely and with the understanding that our actual future results may be materially different from what we expect.

USE OF PROCEEDS

We estimate the net proceeds to us from the sale to the public of shares of our common stock in this offering will be approximately \$ million, after deducting the underwriting discount and estimated offering expenses payable by us. If the underwriter exercises its over-allotment option in full, we estimate the net proceeds to us from this offering will be approximately \$ million.

We currently intend to use the net proceeds from the sale of the securities offered hereby for working capital, capital expenditures and other general corporate purposes, and for product development. We also may use a portion of the proceeds to finance potential acquisitions and investments in companies or products that are complementary to our business if and when suitable opportunities arise; however, we currently have no commitments or agreements with respect to any such transactions. We have not determined the amounts we plan to spend on the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds of this offering. Pending the application of the net proceeds for these purposes, we intend to invest the net proceeds in short-term, investment-grade securities.

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PRICE RANGE OF COMMON STOCK

Our common stock has been listed on The NASDAQ Capital Market under the symbol RESN. The following table sets forth for the periods indicated the high and low sale prices per share of our common stock as reported on the NASDAQ Capital Market:

Price Per Share High Low

Year Ended December 31, 2016 First Quarter