Resonant Inc
Form 424B5
September 08, 2016

Filed	Pursuant	to Rule	424(t	າ)(5)
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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 SEPTEMBER 8, 2016

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. On September 7, 2016, the last reported sale price for our common stock on The NASDAQ Capital Market was \$5.00 per share.

The aggregate market value of our common stock held by non-affiliates pursuant to General Instruction I.B.6 of Form S-3 is \$34.7 million, based on 9,590,626 shares of common stock outstanding, of which 5,663,453 shares were held by non-affiliates, and a last reported sale price on The NASDAQ Capital Market of \$6.13 on August 9, 2016. During the 12 calendar months prior to and including the date hereof, we have not sold any securities pursuant to General Instruction I.B.6. of Form S-3.

Investing in our common stock involves risks. See Risk Factors beginning on page S-3 of this prospectus supplement.

	Per Sha	
Public Offering Price	\$	\$
Underwriting Discount (1) Proceeds, Before Expenses, to Resonant Inc.	\$	\$
Trocceds, Before Expenses, to Resonant Inc.		
	\$	\$
(1) In addition, we have agreed to reimburse up to \$65,000 of the out-of-pool offering, and to issue to the underwriter warrants to purchase aggregate share common stock sold in the this offering (including the over-allotment option t per-share public offering price. See Underwriting beginning on page S-26 underwriting compensation.	es of our common stock in an amoun to the extent exercised), with an exer	t up to 5% of the shares of cise price equal to 100% of the
We have granted the underwriter the 30-day option to purchase up to an addi price, less the underwriting discount to cover over-allotments, if any.	tional shares of our comm	on stock at the public offering
The Securities and Exchange Commission and state securities regulators have this prospectus supplement or the accompanying prospectus is truthful or corrections.		
We anticipate that delivery of the shares of common stock will be made on o	r about September , 2016.	
Sole Book-Running	g Manager	

National Securities Corporation

The date of this prospectus supplement is September , 2016.

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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.

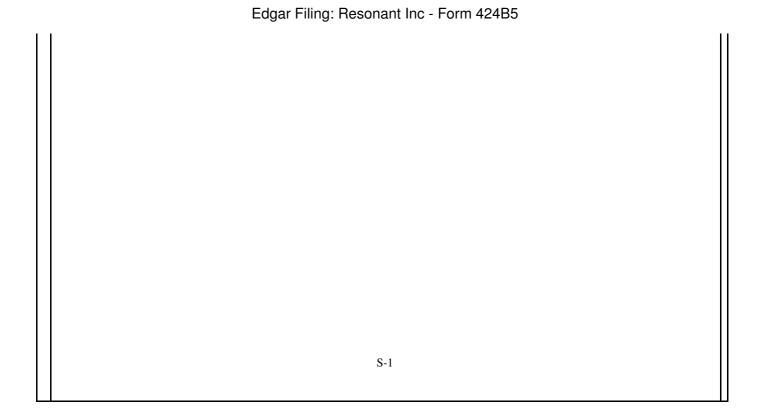
Resonant Inc.

Resonant Inc. is a late-stage development company creating an innovative software and intellectual property platform that has the ability to reduce the time to market and unit cost in the design 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 antenna and its digital baseband. The 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 goal is to utilize our ISN® platform to support our customers in reducing their time to develop complex filter 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. We are developing a series of single-band surface acoustic wave, or SAW, filter 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 carrier aggregation, or CA, requirements of our customers. Finally, we are developing unique filter designs, enabled by ISN®, to replace multiple filters and associated componentry for many bands, with higher performance. In order to succeed, we must convince RF front-end 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 delivering our solutions to the market. Our target customers make part or all of the RF front-end. We intend to retain ownership of our designs, and we expect to be compensated through license fees and royalties based on sales of RF front-end 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.



The	e Offering
	L .
Issuer	Resonant Inc.
Common stock offered by us	shares
Common stock offered by us	snares
Common stock to be outstanding	
after the offering	shares
mater the original	
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-21.
Risk Factors	See Risk Factors beginning on page S-3 for a discussion of factors ye should carefully consider before deciding to invest in shares of our common stock.
NASDAO Capital Market symbol	RESN
NASDAQ Capital Market symbol	KESIN
 option and is based on 9,610,237 shares of our common stock outs 734,990 shares of our common stock issuable upon exe weighted average exercise price of \$5.29 per share; 	standing as of September 2, 2016 and excludes: rcise of outstanding options granted under our equity incentive plans at a
• 877,952 shares of our common stock issuable upon the incentive plans with a weighted average grant date fair value of \$4	release of outstanding restricted stock units granted under our equity 1.28 per share; and
• 766,537 shares of our common stock available for issua	ance or future grant pursuant to our equity incentive plan;
• 2,881,409 shares of our common stock issuable upon ex \$3.13 per share; and	xercise of outstanding warrants at a weighted average exercise price of
the shares of our common stock issuable upon the exerci-	cise of the underwriter s warrant.

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.	
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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 beyond the next 12 months, which capital may not be available on terms acceptable to us, if at all.

Our principal sources of liquidity as of June 30, 2016 consist of existing cash and cash equivalent balances and investments held-to-maturity of \$5.7 million. Currently, we are using approximately \$2.4 million in cash per quarter for operations excluding fixed asset purchases and investments in patents. We believe that we require a minimum of \$9.0 million of additional capital in order to fund our current business plan over, at least, the 12 months following the date of this prospectus supplement. We have undertaken the present offering of our common shares to acquire the necessary capital and through this offering we expect to receive net proceeds of approximately \$9.2 million without exercise of the over-allotment option and approximately \$10.7 million if the over-allotment option is exercised in full. In the event we require additional capital, there can be no assurance that it will be available to us on acceptable terms, or at all. Additionally, if we issue additional equity securities to raise funds, whether to potential customers or other investors, 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.

The report of our independent registered public accounting firm for the year ended December 31, 2015 states that due to our lack of revenue and historical losses from operations there is substantial doubt about our ability to continue as a going concern.

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 only a preliminary business plan upon which investors may evaluate our prospects. We have never generated revenues and we have a history of losses from operations with an accumulated deficit as of June 30, 2016 of \$37.0 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 will require additional funds to respond to business challenges, including the need to 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 complete the development of our technology and find 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 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 potential customers;
•	distinguish ourselves from competitors in our industry;
•	develop and offer a competitive technology that meet our potential 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.
	unable to meet one or more of these objectives or otherwise adequately address the risks and difficulties that we face, our business may a revenue may decline and we may not be able to achieve growth or long-term profitability.

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 RF front-end modules that incorporate our designs.

Our target customers either make part or all of the RF front-end. 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 we may encounter resistance to our licensing strategy. The failure of 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 a design that meets our customers specifications. Even if we succeed in developing a design that meets all of a customers specifications, the customers could decline to use our designs in their products. Further, our customers 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 several customers that have given us stringent performance specifications. If successfully developed, 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 or that our final designs will have acceptable performance and meet our customers specifications. 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, and there is no assurance that our designs will ever be licensed. 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 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 required to fabricate our duplexer designs through our engagement of filter fabricators or manufacturers. For some of our customers that will not manufacture our design themselves, our customer may insist on approving 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.

We believe our designs can be manufactured using existing technology, but we will be dependent on the manufacturer s filter fabrication processes and capabilities for our filter designs. Even if we successfully design a fully compliant duplexer, the customer will 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 our design in commercial quantities.

Our SAW-based circuit 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 are developing complex RF circuit designs, which is inherently challenging. The substantial majority of our filter designs have only been manufactured as initial prototypes. Furthermore, we will be relying on our customers and filter fabricators or manufactures to manufacture our designs. They will need to manufacture our designs in commercial quantities at an acceptable cost, and we will 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 and schedules. They may encounter difficulties in scaling up production of our designs currently in development or other future designs, including problems with quality control and assurance, raw material and component supply shortages, 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 circuit 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 contemplates licensing our designs to customers, who will manufacture our circuit designs themselves or rely on third party manufacturers, commonly referred to as fab houses, to fabricate our circuit designs for integration into the customer's overall product. Many fab houses 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 fab houses to manufacture our designs. We believe the economics can be structured to make it attractive to the fab houses 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 fab houses 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 reliable 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 are actively working 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 are currently working on filter designs with only a small number of customers, who may decide not to continue their relationship with us. We expect to derive our revenues from a small number of customers. Our revenues may fluctuate significantly in the future should we develop our technology and enter into new customer relationships. 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 as module suppliers vertically integrate by acquiring component suppliers and fabs. This may lead to fewer customers and reduced demand for our designs and replacement of our designed products by the combined entity with those of our competitors, each of which could adversely affect our business, financial condition and results of operations.

We plan to be a design firm licensing our filter circuit designs to manufacturers of RF front-ends for mobile devices. If our circuit designs do not achieve widespread market acceptance among RF front-end manufacturers, we will not be able to generate the revenue necessary to support our business.

Achieving acceptance among RF front-end manufacturers of our circuit designs will be crucial to our continued success. We have no history of marketing circuit designs and we may fail to generate significant interest in our initial commercial circuit designs or any other circuit designs we may develop. 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 develo	opments related to	manufacturing,	marketing ar	nd selling our o	designs.
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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 with prospective customers and adversely affect our future revenues and operating costs.

We are developing highly complex filters designs using a new approach. We have not previously produced any 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.

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 improve performance. There can be no assurance that our surface acoustic wave, or SAW, filter designs will cost sufficiently less to manufacture than existing bulk acoustic wave, or BAW, filters, or that our tunable filter designs can replace a sufficient number of conventional filter designs, to prove economically attractive to RF front-end manufacturers or that our filter designs will be smaller in size or perform better.

Our technologies are not yet verified in practice or on a commercial scale.

Our technologies have not been tested in a commercial setting or on a commercial scale. There is no assurance that we will be able to fully develop or license our proposed designs on a timely basis, or at all.

Our industry is subject to intense competition and rapid technological change, which may result in circuit 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 and 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 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 under development, or any future designs we may have, and its technologies obsolete. Many of our competitors have or may have greater corporate, financial, operational, sales and marketing 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.

According to our business plan, our initial circuit designs will be 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:

•	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 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 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 and other countries, 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, trade secret and patent laws, confidentiality procedures and contractual provisions to protect our proprietary methods and technologies. We currently hold several 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 many 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 circuit 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.

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

Our customer agreements likely will 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 circuit 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 commercially available software pursuant to annual licenses, and the inability to renew any of these licenses could adversely affect our ability to design new RF filters 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 annual 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 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 management team and financial reporting group is limited in size and experience which may impact the implementation and administration of financial and reporting controls and procedures.

Although our management team makes certain representations about the financial and reporting controls and procedures in our offering documentation, our management team has limited experience in implementing and maintaining our operations and our financial processes. Financial and reporting controls and procedures implemented and maintained by our management team, now or in the future, may not be adequate, with the result that there may be substantial deficiencies that will need remediation in the future. If there are inadequate controls and procedures, our financial statements and our reporting may be inaccurate or untimely.

The loss of the services of our key management and personnel or the failure to attract additional key personnel could adversely affect our ability to operate our business.

A loss of one or more of our current officers or key employees could severely and negatively impact our operations. Specifically, the loss of the services of any of the following would be material to us: Terry Lingren, our Chief Executive Officer; George Holmes, our President and Chief Commercial Officer; Robert Hammond, our Chief Technology Officer; and Neal Fenzi, our Chief Operating Officer. We have no present intention of obtaining key-man life insurance on any of our executive officers or management. Additionally, competition for highly skilled technical, managerial and other personnel is intense. As our business develops, we might not be able to attract, hire, train, retain and motivate the highly skilled managers and employees we need to be successful. If we fail to attract and retain the necessary technical and managerial personnel, our business may not grow, may suffer and might fail.

We may have 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.

Our worldwide operations are subject to political,	legal and economic risks and	l natural disasters, i	which could have a i	material adverse ej	ffect
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, fire, 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 convertible debt instruments, derivative instruments, other financial instruments and income taxes.

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.

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.

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 June 30, 2016 was approximately \$5.6 million, or approximately \$0.60 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.

A securities class action lawsuit and shareholder derivative lawsuit are pending against us and could have a material adverse effect on our business, results of operations and financial condition.

A putative class action lawsuit and shareholder derivative lawsuit are pending against us and certain of our directors and officers. These lawsuits may divert financial and management resources that would otherwise be used to benefit our operations. Although we deny the material allegations in the lawsuits and intend to defend ourselves vigorously, defending the lawsuits could result in substantial costs. No assurances can be given that the results of these matters will be favorable to us. An adverse resolution of any of these lawsuits could have a material adverse effect on our results of operations and financial condition. In addition, we may be the target of securities-related litigation in the future, both related and unrelated to the existing class action and shareholder derivative lawsuits. 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, as a result of the pending 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 the following:

•	the progress, completion or failure of efforts to design our first commercial duplexer;
•	a customer decision regarding incorporation of our first duplexer design 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;
•	litigation involving us, our industry, or both;
•	regulatory developments in the United States, foreign countries, or both;

•	general economic conditions and trends;			
•	major catastrophic events;			
•	lockup releases, sales of large blocks of our common stock;			
•	departures of key employees; or			
•	an adverse impact on the company from any of the other risks cited herein.			
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. A putative class action lawsuit and shareholder derivative lawsuit are pending against us and certain of our directors and officers. In addition, we may be the target of securities-related litigation in the future, both related and unrelated to the existing lawsuits. 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.				
Insiders have substantial control over us, which could limit your ability to influence the outcome of key transactions, including a change of control.				
beneficially be able to acquisition your interest could depress	tors, executive officers and each of our stockholders who own greater than 5% of our outstanding common stock, in the aggregate, ly own approximately 41.1% of the outstanding shares of our common stock as of June 30, 2016. As a result, these stockholders will influence or control matters requiring approval by our stockholders, including the election of directors and the approval of mergers, as or other extraordinary transactions. They may also have interests that differ from yours and may vote in a manner that is adverse to ests. This concentration of ownership may have the effect of deterring, delaying or preventing a change of control of our company, rive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company and might affect the market price of our common stock.			
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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 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.

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:

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• 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 circuit 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 circuit 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 circuit 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 potential 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.

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:

•	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;
•	the effects of market conditions on our stock price and operating results;
• with defer	our ability to maintain our competitive technological advantages against competitors in our industry and the related costs associated nding 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;
• manufacti	our expectations concerning our relationships with our customers and other third parties and our customers relationships with their urers;
•	the attraction and retention of qualified employees and key personnel;
•	future acquisitions of or investments in complementary companies or technologies; and
• and Unite	our ability to comply with evolving legal standards and regulations, particularly concerning requirements for being a public company od States export regulations.
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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 filings 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 since May 29, 2014. Prior to that date, there was no public trading market for our common stock. 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, 2014		
Second Quarter (from May 29, 2014)	\$ 11.54	\$ 7.25
Third Quarter	\$ 8.24	\$ 6.02
Fourth Quarter	\$ 12.00	\$ 4.93
Year Ended December 31, 2015		
First Quarter	\$ 19.86	\$ 7.05
Second Quarter	\$ 7.52	\$ 2.84
Third Quarter	\$ 5.75	\$ 1.93
Fourth Quarter	\$ 4.84	\$ 2.51
Year Ending December 31, 2016		
First Quarter	\$ 3.50	\$ 1.69
Second Quarter	\$ 4.70	\$ 2.50
Third Quarter (through September 7, 2016)	\$ 6.41	\$ 4.01

On September 7, 2016, the last reported sale price of our common stock on The NASDAQ Capital Market was \$5.00 per share. On September 2, 2016, we had approximately 93 holders of record of our common stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees.

DIVIDENDS

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our common s