Resonant Inc
Form 10-Q
August 13, 2015
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

ý Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the quarterly period ended June 30, 2015

or

o Transition Report Pursuant Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from to .

Commission file number 001-36467

RESONANT INC.
(Exact name of registrant as specified in its charter)

Delaware	45-4320930
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

110 Castilian Drive, Suite 100
Santa Barbara, California 93117
(Address of principal executive offices, zip code)
(805) 308-9803
(Registrant’s telephone number, including area code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes ý No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer,” and “smaller” reporting company” in Rule 12b-2 of the Exchange Act (Check one):

Large accelerated filer	o		Accelerated filer	o
Non-accelerated filer	o	(Do not check if smaller reporting company)	Smaller reporting company	x

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

As of August 11, 2015, the issuer had 7,167,280 shares of common stock issued and outstanding.

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RESONANT INC.

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PART I: FINANCIAL INFORMATION

Item 1. Financial Statements

RESONANT INC.
Condensed Consolidated Balance Sheets
(Unaudited)

	December 31, 2014	June 30, 2015
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$5,803,000	$1,782,000
Prepaid expenses and other current assets	106,000	221,000
Investments held-to-maturity	7,999,000	8,000,000
TOTAL CURRENT ASSETS	13,908,000	10,003,000
PROPERTY AND EQUIPMENT		
Fixed assets	1,249,000	1,416,000
Less: Accumulated depreciation and amortization	(208,000)	(423,000)
PROPERTY AND EQUIPMENT, NET	1,041,000	993,000
NONCURRENT ASSETS		
Patents and domain names, net	500,000	653,000
Restricted cash	—	100,000
Other assets	15,000	15,000
TOTAL NONCURRENT ASSETS	515,000	768,000
TOTAL ASSETS	$15,464,000	$11,764,000
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	$223,000	$268,000
Accrued expenses	146,000	48,000
Accrued salaries and payroll related expenses	315,000	424,000
Deferred rent, current portion	36,000	35,000
TOTAL CURRENT LIABILITIES	720,000	775,000
LONG-TERM LIABILITIES		
Deferred rent	54,000	37,000
TOTAL LIABILITIES	774,000	812,000
Commitments and contingencies (Note 7)	0	0
STOCKHOLDERS' EQUITY		
Common stock, $0.001 par value, 47,000,000 authorized and 6,931,984 outstanding as of December 31, 2014, and 7,162,746 outstanding as of June 30, 2015	7,000	7,000
	—	—

Preferred stock, $0.001 par value, 3,000,000 authorized and none outstanding as of December 31, 2014 and June 30, 2015		
Additional paid-in capital	35,880,000	36,515,000
Accumulated deficit	(21,197,000)	(25,570,000)
TOTAL STOCKHOLDERS' EQUITY	14,690,000	10,952,000
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$15,464,000	$11,764,000

See Accompanying Notes to Condensed Consolidated Financial Statements

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RESONANT INC.
Condensed Consolidated Statements of Operations
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2014	2015	2014	2015
REVENUES	$—	$—	$—	$—
OPERATING EXPENSES				
Research and development expenses	969,000	1,094,000	1,404,000	2,091,000
General and administrative expenses	455,000	943,000	977,000	2,070,000
Depreciation and amortization	62,000	116,000	75,000	227,000
TOTAL OPERATING EXPENSES	1,486,000	2,153,000	2,456,000	4,388,000
OPERATING LOSS	(1,486,000)	(2,153,000)	(2,456,000)	(4,388,000)
OTHER INCOME (EXPENSE)				
Interest and investment income	2,000	8,000	2,000	16,000
Interest expense	(2,099,000)	—	(2,808,000)	—
Fair value adjustments to warrant and derivative liabilities	252,000	—	(2,015,000)	—
Other income	1,164,000	—	1,164,000	
TOTAL OTHER INCOME (EXPENSE)	(681,000)	8,000	(3,657,000)	16,000
LOSS BEFORE INCOME TAXES	(2,167,000)	(2,145,000)	(6,113,000)	(4,372,000)
Provision for income taxes	—	—	(1,000)	(1,000)
NET LOSS	$(2,167,000)	$(2,145,000)	$(6,114,000)	$(4,373,000)
NET LOSS PER SHARE - BASIC AND DILUTED	$(0.69)	$(0.31)	$(2.95)	$(0.63)
Weighted average shares outstanding — basic and diluted	3,136,955	7,160,890	2,074,380	7,119,569

See Accompanying Notes to Condensed Consolidated Financial Statements

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RESONANT INC.
Condensed Consolidated Statements of Stockholders' Equity
For The Six Months Ended June 30, 2015
(Unaudited)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance, December 31, 2014	6,931,984	$7,000	$35,880,000	$(21,197,000)	$14,690,000
Issuance of common stock for compensation	22,578	—	—	—	—
Stock-based compensation	—	—	680,000	—	680,000
Exercise of warrants, cashless	208,184	—	—	—	—
Tax withholding on net issuance of common stock for-compensation	—	—	(45,000)	—	(45,000)
Net loss	—	—	—	(4,373,000)	(4,373,000)
Balance, June 30, 2015	7,162,746	$7,000	$36,515,000	$(25,570,000)	$10,952,000

See Accompanying Notes to Condensed Consolidated Financial Statements

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RESONANT INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	Six Months Ended June 30, 2014	2015
CASH FLOWS FROM OPERATING ACTIVITIES		
Net Loss	$(6,114,000)	$(4,373,000)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	75,000	227,000
Amortization of deferred finance costs	2,404,000	—
Stock-based compensation	501,000	680,000
Non-cash investment income	—	(11,000)
Gain on extinguishment of derivative liability	(1,164,000)	—
Fair value adjustments to warrant and derivative liabilities	2,015,000	—
Changes in assets and liabilities:		
Prepaids and other current assets	102,000	(115,000)
Accounts payable	548,000	45,000
Accrued expenses	(139,000)	(98,000)
Accrued compensation	85,000	109,000
Deferred rent	64,000	(18,000)
Net cash used in operating activities	(1,623,000)	(3,554,000)
CASH FLOWS FROM INVESTING ACTIVITIES		
Capital expenditures	(540,000)	(168,000)
Expenditures for patents and domain names	(65,000)	(165,000)
Purchase of restricted cash investment	—	(100,000)
Sale of investment held-to-maturity	—	10,000,000
Purchase of investments held-to-maturity	—	(9,989,000)
Net cash used in investing activities	(605,000)	(422,000)
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from sale of common stock from the IPO	18,630,000	—
Deferred IPO cost	(2,388,000)	—
Proceeds from issuance of warrants	1,000	
Payment of tax withholdings on net issuance of common stock for compensation	—	(45,000)
Net cash provided by (used in) financing activities	16,243,000	(45,000)
NET INCREASE (DECREASE) IN CASH	14,015,000	(4,021,000)
CASH — Beginning of period	3,339,000	5,803,000
CASH — End of period	$17,354,000	$1,782,000
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Interest	$404,000	$—
Taxes Paid	$1,000	$1,000
SUPPLEMENTAL SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITIES		
Conversion of senior note	$7,000,000	$—
Conversion of subordinated note	$2,400,000	$—

Extinguishment of derivative liability	$5,526,000	$—
Reclassification warrant liabilities to additional paid-in capital	$3,658,000	$—

See Accompanying Notes to Condensed Consolidated Financial Statements

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RESONANT INC.
Notes to Condensed Consolidated Financial Statements

NOTE 1—ORGANIZATION AND DESCRIPTION OF BUSINESS

Overview

Resonant Inc. is a late-stage development company located in Santa Barbara, California. The condensed consolidated statements of operations presented in our condensed consolidated financial statements represent the activities of Resonant Inc. for the three and six months ended June 30, 2014 and June 30, 2015. The condensed consolidated balance sheets presented in the consolidated financial statements represent the activities of Resonant Inc. as of December 31, 2014 and June 30, 2015.

We are creating innovative filter designs for radio frequency, or RF, front-ends for the mobile device industry. The RF front-end is the circuitry in a mobile device responsible for analog signal processing and is located between the device's antenna and its digital baseband. We use a fundamentally new technology called 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. We are using ISN to develop new classes of filter designs.

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 modules 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 completed our first single-band filter design (a duplexer) for band 3 in the first quarter of 2015. This project has been our principal focus from inception through the first quarter of 2015, when we started a second project. We developed the band 3 duplexer using commercial product specifications provided under a development agreement with a prospective customer. The prospective customer terminated the formal development agreement in the first quarter of 2015 and informed us that our design did not meet all the specifications.

We continued to work on this project directly with the filter manufacturer, or fabrication facility or fab, and have since completed the first generation of this band 3 filter. We consider the band 3 filter design to have competitive cost, size and performance. Additionally, in July 2015 we completed the second generation of this band 3 filter at a reduced cost and size and with improved performance. We are collaborating with the filter manufacturer to continue to submit the second generation band 3 filter design for consideration by our prospective customers and we are providing the fab with manufactured parts for testing.

In the first quarter of 2015, we started a development project with a second customer, a filter manufacturer, for the design of our next single-band RF filter, another duplexer. This duplexer is for a different band than our first duplexer. We have received the first set of manufactured parts of our design for review and testing, following which we expect revisions to the design prior to its completion. Our objective is to develop a new duplexer design for this second customer to market to RF front-end manufacturers and mobile device OEMs. The second customer has not committed to use the resulting design and terms of a license have not been finalized.

We believe that our ISN technology will also enable us to produce tunable filters. These tunable filters are electronically programmed in real time for different RF frequency bands so that one filter can do the work of many and therefore replace multiple filters and significantly lower the cost and size of RF front-ends. Several prospective customers have expressed interest and we are now developing a prototype tunable filter to demonstrate our value proposition. We expect to have demonstration parts available for assessment by these prospective customers with the goal of securing a lead customer thereafter.

We were founded as Resonant LLC on May 29, 2012 (our inception date). We commenced business on July 6, 2012 with initial contributions from our founders and Superconductor Technologies Inc., or STI. The founders contributed $200,000 and agreed to work full-time without pay until we secured adequate funding. STI contributed a patent portfolio, software, equipment, temporary office space and an early version of the development agreement with our first customer.

The founders loaned us an aggregate of $200,000 during the first quarter of 2013, and we issued a series of warrants to the founders in connection with these loans. We refer to the founder loans as Bridge Loans and the founder warrants as Bridge Loan Warrants. We repaid the Bridge Loans in the second quarter of 2013.

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We changed our form of ownership from a limited liability company to a corporation in an exchange transaction on June 17, 2013. The founders exchanged all of their units and warrants of Resonant LLC for common stock and warrants of Resonant Inc. STI exchanged all of its units of Resonant LLC for a $2.4 million subordinated convertible note of Resonant Inc., or Subordinated Convertible Note. The Subordinated Convertible Note was scheduled to mature on September 17, 2014, was interest free, was secured by all of our assets and was subordinated to our senior convertible notes. This note was converted into common stock in our initial public offering, or IPO.

We closed our first financing on June 17, 2013. We issued $7.0 million of Senior Convertible Notes in a private placement. The notes were to mature on September 17, 2014, bore interest at 6.0% per annum, were secured by all of our assets and would automatically convert into 2,087,667 shares of our common stock upon consummation of a qualified offering. Interest was payable in cash or shares of common stock. We paid a placement agent a commission of $700,000 and issued the agent warrants to purchase 208,763 shares of our common stock at an exercise price of $3.35 per share. We also issued the placement agent a warrant to purchase 222,222 shares of our common stock for business consulting services at an exercise price of $0.01 per share. These notes were converted into common stock in our IPO.

Initial Public Offering

We closed our IPO, of which we issued 3,105,000 shares of common stock (which includes the exercise in full by the underwriter of its over-allotment option) at a price of $6.00 per share, on June 3, 2014. We received aggregate net proceeds, after deducting underwriting discounts and commissions and estimated offering expenses, of approximately $16.2 million. Our common stock commenced trading on the Nasdaq Capital Market under the symbol “RESN” on May 29, 2014, or IPO Date. The Securities and Exchange Commission declared effective a registration statement relating to these securities on May 28, 2014.

MDB Capital Group, LLC, or MDB, acted as the sole underwriter for our IPO. Simultaneous with the funding of the IPO, we issued the underwriter a five-year warrant to purchase 310,500 shares of common stock at an exercise price of $7.50 per share, which we refer to as the Underwriting Warrant. The warrant was not exercisable until November 24, 2014 (180-days from the date of the underwriting agreement).

Our Senior Convertible Notes automatically converted into 2,087,667 shares of common stock effective upon the completion of the IPO. We paid in cash the accrued interest of $404,000. Similarly, our Subordinated Convertible Note automatically converted into 700,000 shares of common stock. There was no accrued interest on this note. The shares issued on conversion of the Senior Convertible Notes were subject to a 180-day lockup which expired November 24, 2014, and the shares issued on conversion of the Subordinated Convertible Note were subject to a 12-month lockup which expired May 28, 2015.

Capital Resources and Liquidity

We have earned no revenue since inception, and our operations have been funded with initial capital contributions and proceeds from the sale of equity securities and debt. We have incurred accumulated losses at December 31, 2014 and June 30, 2015, of $21.2 million and $25.6 million, respectively, and cash and cash equivalents of $5.8 million and $1.8 million, respectively. Additionally, as of December 31, 2014 and June 30, 2015, we had $8.0 million and $8.0 million in short-term investments, respectively. These losses are primarily the result of research and development costs associated with commercializing our technology, combined with start-up, financing and public company costs. We expect to continue to incur substantial costs for commercialization of our technology on a continuous basis because our business model involves developing and licensing custom filter designs.

Our condensed consolidated financial statements contemplate the continuation of our business as a going concern. However, we are subject to the risks and uncertainties associated with a new business. We do not yet have the ability to earn revenue, we have incurred significant losses from operations since inception and our operations have been funded with initial capital contributions, proceeds from the sale of equity securities and debt. Our principal sources of liquidity as of June 30, 2015 consist of existing cash balances and investments of $9.8 million. We have determined that additional capital from the sale of equity securities or the incurrence of indebtedness and, ultimately, the achievement of significant operating revenues will be required for us to continue operations through 2016 and beyond. We have had discussions with potential customers that may provide funding through debt and/or equity instruments or the licensing of future filter designs. There can be no assurance that additional financing will be available to us from potential customers or others 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. If we cannot raise needed funds, we might be forced to make substantial reductions in our

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operating expenses, which could adversely affect our ability to implement our business plan and ultimately our viability as a company. These condensed 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.

The accompanying condensed consolidated financial statements at June 30, 2015 and for the three and six months ended June 30, 2014 and 2015 are unaudited, but include all adjustments, consisting of normal recurring entries, that management believes to be necessary for a fair presentation of the periods presented. Prior period figures have been reclassified, wherever necessary, to conform to current presentation. Interim results are not necessarily indicative of results for a full year. Balance sheet amounts as of December 31, 2014 have been derived from our audited consolidated financial statements as of that date.

The condensed consolidated financial statements included herein have been prepared by us pursuant to the rules and regulations of the Securities and Exchange Commission, or SEC. Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP, have been condensed or omitted pursuant to such rules and regulations. The financial statements should be read in conjunction with our audited consolidated financial statements contained in our Annual Report on Form 10-K for the year ended December 31, 2014. Our operating results will fluctuate for the foreseeable future. Therefore, period-to-period comparisons should not be relied upon as predictive of the results in future periods.

NOTE 2—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Use of Estimates—The accompanying condensed financial statements have been prepared in accordance with U.S. GAAP. In the opinion of management, all adjustments (consisting of normal accruals) considered for a fair presentation have been included. Significant estimates made in preparing these financial statements include (a) assumptions to calculate the fair values of financial instruments, derivatives, warrants and equity instruments and other liabilities and the deferred tax asset valuation allowance and (b) the useful lives for depreciable and amortizable assets. Actual results could differ from those estimates. In the opinion of management, all adjustments, including normal recurring accruals considered necessary for a fair presentation, have been included.

Restricted Cash—Restricted cash at June 30, 2015 represents cash held within a certificate of deposit with a financial institution which serves as collateral for our corporate credit cards. The restriction on the cash will lapse in conjunction with the expiration of the use of the corporate credit cards. There was no restricted cash as of December 31, 2014.

Investments—Securities held-to-maturity: Management determines the appropriate classification of debt securities at the time of purchase and reevaluates such designation as of each statement of financial position date. Investment/Debt securities are classified as held-to-maturity when we have the positive intent and ability to hold the securities to maturity. Held-to-maturity securities are stated at amortized cost, adjusted for amortization of premiums and accretion of discounts to maturity computed under the effective interest method. Such amortization is included in investment income. Interest on securities classified as held-to-maturity is included in investment income.

With respect to debt securities, when the fair value of a debt security classified as held-to-maturity or available for sale is less than its amortized cost, management assesses whether or not: (i) we have the intent to sell the security or (ii) it is more likely than not that we will be required to sell the security before its anticipated recovery. If either of these conditions is met, we must recognize an other-than-temporary impairment earnings for the difference between the debt security’s amortized cost basis and its fair value, and includes such amounts in net securities gains (losses).

For debt securities that do not meet the above criteria and are not expected to be recovered at the amortized cost basis, the security is considered other-than-temporarily impaired. For these debt securities, we separate the total impairment into the credit loss component and the amount of the loss related to other factors. In order to determine the amount of the credit loss for a debt security, we calculate the recovery value by performing a discounted cash flow analysis based on the current cash flows and future cash flows management expects to recover. The discount rate is the effective interest rate implicit in the underlying debt security. The amount of the total other-than-temporary impairment related to credit loss is recognized in earnings and is included in net securities gains (losses). The amount of the total other-than-temporary impairment related to other factors is recognized in other comprehensive income. For debt securities that have recognized as other-than-temporary impairment through earnings, if through subsequent evaluation there is a significant increase in the cash flow expected, the difference between the amortized cost basis and the cash flows expected to be collected is accreted as interest income.

From January through June 2015, we invested in debt securities and federally insured certificates of deposit that we have classified as held-to-maturity as we currently meet the criteria for this investment classification. As of June 30, 2015, the

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amortized cost value is $8.0 million with an unrealized loss of $1,000 and a fair value of $8.0 million. The investments mature in various increments from August, 2015 through February, 2016. Investments representing $5.0 million are foreign debt securities of which $2.0 million matures on each of August 3, 2015 and October 22, 2015, and $1.0 million matures on August 5, 2015. The remaining $3.0 million in held-to-maturity investments are in federally insured certificates of deposit that mature at various amounts from February 5, 2016 through February 25, 2016. We have not recognized an other-than-temporary impairment gain or loss or a comprehensive gain or loss to-date. We have recorded investment income of $8,000 and $16,000 for the three and six months ended June 30, 2015, respectively, associated with these investments. There were no investment securities as of June 30, 2014.

Fair Value of Financial Instruments—We measure certain financial assets and liabilities at fair value based on the exchange price that would be received for an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. The carrying amounts of our financial instruments, including cash equivalents, accounts payable, and accrued liabilities, approximate fair value due to their short maturities.

The carrying amount of our warrant liabilities and our derivative liability related to the Senior Convertible Notes were marked to market each reporting date until the warrants and derivative liability were settled. Prior to the IPO Date, the fair value of the financing warrant liability and derivative liability (see Note 3 and Note 4) were estimated using a Monte Carlo option-pricing model, which takes into consideration the market values of comparable public companies, considering among other factors, the use of multiples of earnings, and adjusted to reflect the restrictions on the ability of our securities to trade in an active market. As of the IPO Date, the fair value of the remaining warrants and the financing warrant liability and derivative liability, were estimated using a Black-Scholes option valuation technique as it embodies all of the requisite assumptions (including trading volatility, remaining term to maturity, market price, strike price, and risk free rates) necessary to fair value these instruments. Estimates of expected term were based on the estimated time to expiration. The risk-free interest rate was based on the U.S. Treasury yield for a term consistent with the estimated expected term. We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, we use an expected dividend yield of zero. Our expected volatility was derived from the historical volatilities of several public companies in similar industries because we have limited information on the volatility of the price of our common stock because we have no trading history. When making the selections of our industry peer companies to be used in the volatility calculation, we consider operational area, size, business model, industry and the business of potential comparable companies. These historical volatilities are weighted based on certain qualitative factors and combined to produce a single volatility factor. All of the warrant liabilities and the derivative liability are valued using level 3 inputs (see Note 6 for the range of assumptions used).

Prior to the IPO Date, the determination of the value of our common stock, and for purposes of establishing the value of the warrants and derivatives related to the bridge financing, the senior convertible notes, the subordinated convertible notes and the consulting warrants, management considered several factors and the probability of achieving each one of them. The significant factors were (1) securing adequate funding to complete the single-band commercial surface acoustic wave, or SAW, duplexer design under the terms of the development agreement with our first customer; (2) developing a working duplexer product that meets the specifications of our first customer; and (3) our first customer exercising its licensing option if the duplexer product met its specifications. The probabilities for achieving each of these factors changed during the periods from January 31, 2013 to June 16, 2013 and December 31, 2013. These probabilities were affected by our ability to hire technical personnel to develop the technology and design the product, establish a management team to develop a business plan, secure financing, execute the business plan, and interact with our first customer to achieve the milestones contained in the development agreement with them. As we made progress in each of these areas over the period from January 31, 2013 through December 31, 2013 the probability elements in each of these factors changed and increased. These increases resulted in higher valuations of our common stock and accordingly the values of the warrants and derivatives at each of these periods. Following the IPO Date, we used the current market value of our common stock to assist in determining the value of the warrants and stock options using the Black-Scholes option valuation model.

Cash and Cash Equivalents—We consider all liquid instruments purchased with a maturity of three months or less to be cash equivalents.

Concentration of Credit Risk—We maintain checking accounts at one financial institution. These accounts are insured by the Federal Deposit Insurance Corporation (FDIC) for up to $250,000 per account. Management believes we are not exposed to significant credit risk due to the financial position of the depository institution in which these deposits are held.

Property and Equipment—Property and equipment consists of leasehold improvements associated with our new corporate office, software purchased during the normal course of business, computer equipment and office furniture and fixtures, all of which are recorded at cost. Depreciation and amortization is recorded using the straight-line method over the respective useful lives of the assets ranging from three to five years. Long-lived assets, including software are reviewed for impairment whenever events or circumstances indicate that the carrying amount of these assets may not be recoverable.

Intangible Assets Subject to Amortization—At December 31, 2014 and June 30, 2015, intangible assets subject to amortization include patents and a domain name purchased for use in operations. Intangible assets are reviewed for impairment whenever events or circumstances indicate that the carrying amount of these assets may not be recoverable.

Deferred Finance Costs—Costs relating to our senior convertible note and subordinated convertible note financings were capitalized and amortized over the term of the related debt using the effective interest method. Due to the conversion of these notes to common stock in connection with the IPO, the unamortized deferred finance costs of $358,000 were fully expensed as of the IPO Date. Amortization of deferred financing costs, including the write-off due to the conversion, were charged to interest expense and totaled $0 and $51,000 for the three and six months ended June 30, 2014, respectively. There were no deferred financing costs for the three and six months ended June 30, 2015.

Research and Development—Costs and expenses that can be clearly identified as research and development are charged to expense as incurred in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 730-10, Research and Development.

Stock-Based Compensation—We account for employee stock options in accordance with ASC Topic 718, Compensation-Stock Compensation. For stock options issued to employees and directors we use the Black-Scholes option valuation model for estimating fair value at the date of grant. For stock options issued for services rendered by non-employees, we recognize compensation expense in accordance with the requirements of ASC 505-50, Equity, or ASC 505-50, as amended. Non-employee option grants that do not vest immediately upon grant are recorded as an expense over the vesting period. At the end of each financial reporting period prior to performance, the value of these options, as calculated using the Black-Scholes option valuation model, is determined, and compensation expense recognized or recovered during the period is adjusted accordingly. Since the fair market value of options granted to non-employees is subject to change in the future, the amount of the future compensation expense is subject to adjustment until the common stock options or warrants are fully vested.

We account for restricted stock units issued to employees at fair value, based on the market price of our stock on the date of grant, net of estimated forfeitures. Compensation expense is recognized for the portion of the award that is ultimately expected to vest over the period during which the recipient renders the required services to the Company generally using the straight-line single option method. The fair value of non-employee restricted stock units awarded are remeasured as the awards vest, and the resulting increase or decrease in fair value, if any, is recognized as an increase or decrease to compensation expense in the period the related services are rendered.

Earnings Per Share, or EPS—EPS is computed in accordance with ASC Topic 260, Earnings per Share, and is calculated using the weighted average number of common shares outstanding during each period. Diluted EPS assumes the conversion, exercise or issuance of all potential common stock equivalents unless the effect is to reduce a loss or increase the income per share. Potential common shares consist of the incremental common shares issuable upon the exercise of stock options (using the treasury stock method), the exercise and/or conversion of our convertible notes and warrants (using the if-converted method).

The following table presents the number of shares excluded from the calculation of diluted net loss per share attributable to common stockholders for the periods below:

	Six Months Ended June 30,

	2014	2015
Common stock warrants	991,484	804,436
Common stock options	376,500	560,000
Total shares excluded from net loss per share attributable to common stockholders	1,367,984	1,364,436

Derivative Instruments—We account for free-standing derivative instruments and hybrid instruments that contain embedded derivative features in accordance with ASC Topic 815, Accounting for Derivative Instruments and Hedging Activities, or ASC 815, as well as related interpretations of this topic. In accordance with this topic, derivative instruments and hybrid instruments are recognized as either assets or liabilities in the balance sheet and are measured at fair values with gains or losses recognized in earnings. Embedded derivatives that are not clearly and closely related to the host contract are bifurcated and are recognized at fair value with changes in fair value recognized as either a gain or loss in earnings. We determined the

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fair value of derivative instruments and hybrid instruments based on available market data using appropriate valuation models, giving consideration to all of the rights and obligations of each instrument.

We estimated the fair values of derivative instruments and hybrid instruments using various techniques (and combinations thereof) that are considered to be consistent with the objective of measuring fair values. In selecting the appropriate technique, we considered, among other factors, the nature of the instrument, the market risks that it embodies and the expected means of settlement. For less complex instruments, such as free-standing warrants, we generally used the Black-Scholes option valuation model, adjusted for the effect of dilution, because it embodies all of the requisite assumptions (including trading volatility, estimated terms, dilution and risk free rates) necessary to fair value these instruments. Estimating fair values of derivative financial instruments requires the development of significant and subjective estimates that may, and are likely to, change over the duration of the instrument with related changes in internal and external market factors. Under ASC 815, increases in the trading price of our common stock and increases in fair value during a given financial quarter result in the application of non-cash derivative expense. Conversely, decreases in the trading price of our common stock and decreases in fair value during a given financial quarter would result in the application of non-cash derivative income. In situations where the Black-Scholes option valuation model was not deemed appropriate, we used a Monte Carlo option-pricing model to determine the fair value of derivative instruments.

Income Taxes—We account for income taxes in accordance with ASC Topic 740, Income Taxes, or ASC 740, which requires the recognition of deferred tax assets and liabilities for the future consequences of events that have been recognized in our condensed consolidated financial statements or tax returns. The measurement of the deferred items is based on enacted tax laws. In the event the future consequences of differences between financial reporting bases and the tax bases of our assets and liabilities result in a deferred tax asset, ASC 740 requires an evaluation of the probability of being able to realize the future benefits indicated by such asset. A valuation allowance related to a deferred tax asset is recorded when it is more likely than not that some portion or the entire deferred tax asset will not be realized. As part of the process of preparing our consolidated financial statements, we are required to estimate our income tax expense in each of the jurisdictions in which we operate. We also assess temporary differences resulting from differing treatment of items for tax and accounting differences. We record a valuation allowance to reduce the deferred tax assets to the amount of future tax benefit that is more likely than not to be realized. For the period when we were organized as a limited liability company, we were treated as a partnership for federal and state income tax purposes under the entity classification domestic default rules. As of December 31, 2014 and June 30, 2015, no liability for unrecognized tax benefits was required to be reported. We recognize interest and penalties related to income tax matters in income taxes, and there were none for the three and six months ended June 30, 2014 and June 30, 2015, respectively.

We have filed, or are in the process of filing, tax returns that are subject to audit by the respective tax authorities. Although the ultimate outcome would be unknown, we believe that any adjustments that may result from tax return audits are not likely to have a material, adverse effect on our condensed consolidated results of operations, financial position or cash flows.

Recent Accounting Pronouncements

We have reviewed all of the recent accounting pronouncements and have determined that they have not or will not have a material impact on our condensed consolidated financial statements, or do not apply to our operations.

NOTE 3—BRIDGE LOANS, MEMBER LOAN AND CONVERTIBLE DEBT

Senior Convertible Note

We entered into a securities purchase agreement on June 17, 2013 for the sale to multiple investors of $7.0 million principal amount of senior secured convertible promissory notes, which we refer to as Senior Convertible Notes. MDB served as placement agent in this financing. We closed the sale on the same day and issued $7.0 million in principal amount of Senior Convertible Notes. We also paid $700,000 to MDB as a placement agent fee. The net cash proceeds were $6.3 million. We also issued to MDB a warrant to purchase shares of our common stock as consideration for its financing services, and another warrant to purchase shares of our common stock as consideration for business consulting services. The Senior Convertible Notes bore interest at a 6% per annum and were scheduled to mature on September 17, 2014 unless converted earlier.

The conversion feature included in the terms of the Senior Convertible Notes was determined to be a derivative liability that we bifurcated for accounting purposes. We measured the derivative liability at fair value at the issue date of Senior Convertible Notes based on a Monte Carlo option-pricing model and determined the value to be $1.9 million. The derivative liability was recorded with a corresponding debit to debt discount that was amortized as interest expense using the effective interest method over the life of the instrument. At the time of issuance, the Senior Convertible Notes and derivative liability

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were recorded on the balance sheet as a long-term note because the notes mature on September 17, 2014 (greater than one year). Upon a Qualified IPO, or other event that results in the conversion of the notes into common stock, a portion of the carrying value of the derivative liability would be accounted for as an extinguishment of debt and any remaining unamortized debt discount would be expensed at such date. At December 31, 2013, the Monte Carlo option-pricing model used the following assumptions to estimate fair value: equity value of $20.0 million, different conversion prices for different scenarios, time to maturity of 9-15 months under the scenarios based on the expected date of a Qualified IPO, volatility of 102.1% and risk free rate of 0.19%. As noted above, in connection with the Senior Convertible Notes and as a result of the warrants issued to MDB as consideration for its placement agent services, we determined that an additional discount to the debt should be recorded in the amount of $300,000, and we were amortizing this amount using the effective interest method over the life of the instrument. The Senior Convertible Notes did not include any financial covenants.

Upon the completion of the IPO, which was considered a Qualified IPO under the Senior Convertible Note agreement, the Senior Convertible Notes were converted into 2,087,667 shares of common stock as of the date of the IPO and unpaid interest of $404,000 was paid from the proceeds of the IPO. Additionally, the unamortized debt discount of $780,000 was fully amortized to interest expense for the three and six months ended June 30, 2014. Interest expense, excluding the unamortized debt discount write-off, was $289,000 and $728,000 for the three and six months ended June 30, 2014, respectively. Due to the completion of the IPO and no new debt taken by us, there was no interest expense for the three and six months ended June 30, 2015.

Subordinated Convertible Note

On June 17, 2013, we issued to STI a subordinated senior secured convertible note in the principal amount $2.4 million, which we refer to as the Subordinated Convertible Note, as consideration for our acquisition from STI of its 300,000 Class C units of Resonant LLC and 100 shares of our common stock. The Subordinated Convertible Note did not bear interest and was scheduled to mature on September 17, 2014 unless converted earlier.

The Subordinated Convertible Note was non-interest bearing. We considered the effective interest rate of the Subordinated Convertible Note to be at least 11.8% per annum as the Subordinated Convertible Note was subordinated to the Senior Convertible Notes and had greater inherent risk, and, therefore, it should carry a higher interest rate than that of the Senior Convertible Notes. We calculated a discount to the face value of the Subordinated Convertible Note of $300,000, which we recorded as debt discount and were amortizing as interest expense over the life of the Subordinated Convertible Note using the effective interest rate method. The Subordinated Convertible Note did not include any financial covenants.

Upon the completion of the IPO, which was considered a Qualified IPO under the Subordinated Convertible Note agreement, the Subordinated Convertible Note was converted into 700,000 shares of common stock as of the date of the IPO and there was no unpaid interest. Additionally, the unamortized debt discount of $61,000 was fully amortized to interest expense for the three months ended June 30, 2014. Interest expense, excluding the unamortized debt discount write-off, was $37,000 and $90,000 for the three and six months ended June 30, 2014, respectively. Due to the completion of the IPO, there was no interest expense for the three and six months ended June 30, 2015.

NOTE 4—WARRANT LIABILITIES

From time to time, we and Resonant LLC have issued warrants to purchase shares of common stock and units of membership interest, respectively. These warrants have been issued in connection with the financing transactions and consulting services. Our warrants are subject to standard anti-dilution provisions applicable to shares of our common stock.

Bridge Warrants

In connection with and as an inducement to make the bridge loans in January and March 2013, Resonant LLC issued to each of our 3 founders five-year warrants to purchase Class B units of Resonant LLC at an exercise price of $0.40 per unit, which we refer to as the Bridge Warrants. The Bridge Warrants were issued in two tranches, at the same time the bridge loan was funded, with each founder receiving warrants for 20,833 Class B units on each of January 31, 2013 (for a total of 62,499 Class B units) and March 19, 2013 (for a total of 62,499 Class B units). The founders paid an aggregate of $1,000 in cash for the Bridge Warrants.

We estimated the initial fair value of the Bridge Warrants issued in January 2013 to be $200,000 using the Black-Scholes option valuation model and the following assumptions: exercise price of $0.40 per unit; implied unit price of $3.75; expected volatility of 60%; expected dividend rate of 0%; risk free interest rate of 0.88%; and expiration date of 5 years. We estimated the initial fair value of the Bridge Warrants issued in March 2013 to be $200,000 using the Black-Scholes option valuation model and the following assumptions: exercise price of $0.40 per unit; implied unit price of $3.60; expected volatility of 60%; expected dividend rate of 0%; risk free interest rate of 0.80%; and expiration date of 5 years. (See Note 2).

On June 17, 2013, in connection with our acquisition of all of the outstanding membership interests of Resonant LLC in an exchange transaction, the founders exchanged their Bridge Warrants to purchase an aggregate of 124,998 Class B units of Resonant LLC for Bridge Warrants to purchase an aggregate of 249,999 shares of our common stock at an exercise price of $0.20 per share. All other terms of the Bridge Warrants remained the same. We revalued the Bridge Warrants on June 17, 2013 to $400,000 using the Black-Scholes option valuation model with the following assumptions: exercise price of $0.20 per share; implied stock price of $3.23; expected volatility of 60%; expected dividend rate of 0%; risk free interest rate of 1.06%; and expiration date of 5 years. At each reporting period up through the IPO Date, any changes to the fair value of the Bridge Warrants were recorded in the condensed consolidated statements of operations.

Consulting Warrant, Financing Warrant and Underwriting Warrant

Upon consummation of our Senior Convertible Note financing, (see Note 3), for business consulting services provided by MDB, we issued to MDB a seven-year warrant to purchase 222,222 shares of our common stock at an exercise price of $0.01 per share, which we refer to as the Consulting Warrant. The Consulting Warrant is exercisable six months after the completion of our initial public offering and prior to June 15, 2020. We estimated the initial fair value of the Consulting Warrant to be $700,000 using the Black-Scholes option valuation model with the following assumptions: exercise price of $0.01 per share; implied stock price of $3.23; expected volatility of 68.8%; expected dividend rate of 0%; risk free interest rate of 1.57%; and expiration date of 7 years. (See Note 2).

In addition, for placement agent services provided by MDB in connection with our Senior Convertible Note financing, we issued to MDB a seven-year warrant to purchase shares of our common stock, which we refer to as the Financing Warrant. The Financing Warrant is exercisable six months after the completion of our IPO and prior to June 15, 2020. The Financing Warrant is exercisable for a number of shares of our common stock equal to $700,000 divided by the Financing Warrant's exercise price. Prior to consummation of our Qualified IPO, the exercise price was equal to $6,000,000 divided by the Fully Diluted Shares. Upon consummation of our Qualified IPO, the exercise price was adjusted to be equal to the conversion price of our Senior Convertible Notes. As the value of the Financing Warrant depended on future price movements of our equity, we estimated the fair value of the Financing Warrant at December 31, 2013 to be $700,000 using a Monte Carlo option-pricing model with the following assumptions: equity value of $20 million, different conversion prices for different scenarios, time to maturity of 6.5 years, volatility of 65.3% and risk free rate of 2.28%. (See Note 2).

In connection with the closing of our IPO, we also issued a third warrant to MDB related to their role as the sole underwriter for our IPO, we refer to this as the Underwriting Warrant. We issued them a 5 -year warrant to purchase 310,500 shares of common stock at an exercise price of $7.50 per share. The warrant was not exercisable until November 24, 2014 (180-days from the date of the underwriting agreement) and expires May 28, 2019. We estimated the fair value of the Underwriting Warrant at issuance date to be $901,000 using the Black-Scholes option valuation model with the following assumptions: market price of the stock of $6.00 per share, time to maturity of 5 years, volatility of 63.1%, zero expected dividend rate and risk free rate of 1.5%. (See Note 2).

In August 2014 and October 2014, we entered into agreements with our investor relations firm, or IR Firm, and an IR consultant to provide us with investor relations services. Pursuant to the IR Firm agreement, in addition to monthly cash compensation of $8,500 per month, we issued to the IR Firm a 3-year consulting warrant, or IR Consulting Warrant, for the purchase of 42,000 shares of common stock which become fully vested on July 21, 2015. The IR Consulting Warrant has an exercise price of $8.31 and expires on July 17, 2017. We estimated the fair value of the IR

Consulting Warrant at June 30, 2015 to be $10,000 representing a decrease of $71,000 from the prior quarter. We used the Black-Scholes option valuation model with the following assumptions: market price of the stock of $2.98 per share, time to maturity of 2.0 years, volatility of 60%, zero expected dividend rate and risk free rate of 0.66%. Pursuant to the IR consultant agreement, in addition to monthly cash compensation of $5,000 per month, we issued to the IR consultant a 4-year consulting warrant, or IR Warrant, for the purchase of 6,000 shares of common stock that vests monthly over twelve months. The IR Warrant has an exercise price of $6.50 and expires on September 30, 2018. Since the IR Warrant vests monthly, we estimated the fair value of the IR Warrant at the date of each vesting period over the three and six month periods ending June 30, 2015 using the Black-Scholes option valuation model with the following assumptions: market prices of the stock of $2.98 - $11.62 per share, time to maturity of 3.8 to 3.3 years, volatility of 60% to 81.8%, zero expected dividend rate and risk free rate range of 0.91% to 1.5%. Based on the monthly vesting fair values for the IR Warrant, we recorded expense of $2,000 and $11,000 for the three and six months periods ended June 30, 2015, respectively.

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We recorded reductions of $(69,000) and $(29,000) for stock-based compensation related to the IR warrants during the three and six months ended June 30, 2015, respectively, which was included in general and administration expense.

A roll-forward of warrant share activity from January 1, 2014 to June 30, 2014 is shown in the following table:

	Issued and Outstanding Warrants as of January 1, 2014	Warrants Issued	Warrants Exercised/ Expired	Issued and Outstanding Warrants as of June 30, 2014
Bridge Warrants	249,999	—	—	249,999
Consulting Warrant	222,222	—	—	222,222
Financing Warrant(1)	208,763	—	—	208,763
Underwriting Warrant	—	310,500	—	310,500
	680,984	310,500	—	991,484

A roll-forward of warrant share activity from January 1, 2015 to June 30, 2015 is shown in the following table:

	Issued and Outstanding Warrants as of January 1, 2015	Warrants Issued	Warrants Exercised/ Expired		Issued and Outstanding Warrants as of June 30, 2015
Bridge Warrants	249,999	—	—		249,999
Consulting Warrant	222,222	—	(104,444	)(2)	117,778
Financing Warrant(1)	208,763	—	(130,604	)(2)	78,159
Underwriting Warrant	310,500	—	—		310,500
IR Consulting Warrants	48,000	—	—		48,000
	1,039,484	—	(235,048	)	804,436

(1) The number of shares of common stock underlying the Financing Warrant was determined using an exercise price of $3.35 per share, assuming the IPO price of our common stock in a Qualified IPO would be at least $5.59 per share. Upon completion of the IPO with a price of $6.00 per share, the number of shares was considered unchanged and final.

(2) During the six months ended June 30, 2015, there were 235,048 common stock warrants that were exercised through a cashless exercise which netted 208,184 shares being issued.

Due to the expiration of the redemption and put option features included in the warrants outstanding as of January 1, 2014, the warrants are no longer included as liabilities after the IPO Date. During the three and six months ended June 30, 2014, we recorded a gain of $252,000 and a loss of $382,000, respectively, for the change in fair value of those warrants. There was no expense for the three and six months ended June 30, 2015.

For periods prior to the IPO Date, we used the Monte-Carlo option pricing model which takes into consideration the historical volatilities of comparable public companies using data from Capital IQ and implied volatiles from Bloomberg considering the differences in size among the public companies and us, and the warrant’s time to expiration. Estimates of expected term were based on the estimated time to expiration. The risk-free interest rate was based on the U.S. Treasury yield for a term consistent with the estimated expected term. The Monte-Carlo model used daily steps, assuming 252 trading days per year, which was based on 52 weeks of 5 trading days less 8 holidays, a standard assumption in the industry.

NOTE 5— STOCK-BASED COMPENSATION

2014 Omnibus Incentive Plan

In January 2014, our board of directors approved the 2014 Omnibus Incentive Plan and amended and restated the plan in March 2014. Our stockholders approved the Amended and Restated 2014 Omnibus Incentive Plan, or the 2014 Plan, in March 2014. Our 2014 Plan permits for the issuance of equity based instruments covering up to an initial total of 1,400,000 shares of common stock.

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Option Valuation

We have computed the fair value of options granted to employees and non-employees using the Black-Scholes option valuation model. The compensation costs of non-employee arrangements are subject to re-measurement at each reporting period over the vesting terms as earned. Option forfeitures are estimated at the time of valuation and reduce expense ratably over the vesting period. This estimate will be adjusted periodically based on the extent to which actual option forfeitures differ, or are expected to differ, from the previous estimate, when it is material. The expected term used for options issued to non-employees is the contractual life and the expected term used for options issued to employees is the estimated period of time that options granted are expected to be outstanding. We have estimated the expected life of our employee stock options using the “simplified” method, whereby, the expected life equals the arithmetic average of the vesting term and the original contractual term of the option due to our lack of sufficient historical data. Since our stock has not been publicly traded for a sufficiently long period of time, we are utilizing an expected volatility figure based on a review of the historical volatilities, over a period of time, equivalent to the expected life of the instrument being valued, of similarly positioned public companies within our industry. The risk-free interest rate was determined from the implied yields from U.S. Treasury zero-coupon bonds with a remaining term consistent with the expected term of the instrument being valued.

Stock Options to Employees and Consultants

During the three and six months ended June 30, 2014, we granted incentive stock options for the purchase of 376,500 shares of our common stock to our employees. The options have an exercise price range of $6.00 per share to $7.20 per share with a term of 10 years. A portion of the options vested immediately with the remaining options vesting quarterly over eight to sixteen quarters. The stock options granted had an aggregate grant date fair value of $1.2 million for the three and six months ended June 30, 2014, respectively, utilizing the Black-Scholes option valuation model.

During the three and six months ended June 30, 2015, we granted incentive stock options for the purchase of 15,000 and 70,000 shares, respectively, of our common stock to our employees. The options have an exercise price range of $4.13 per share to $12.98 per share with a term of ten years. The options vest quarterly over sixteen quarters. The options granted had an aggregate grant date fair value of $38,000 and $367,000 for the three and six months ended June 30, 2015, respectively, utilizing the Black-Scholes option valuation model.

We estimated the fair value of stock options awarded during the six months ended June 30, 2014 and June 30, 2015 using the Black-Scholes option valuation model. The fair values of stock options granted for the period were estimated using the following assumptions:

	Stock Option Grants Awarded During the Six Months Ended June 30, 2014	Stock Option Grants Awarded During the Six Months Ended June 30, 2015
Stock Price	$6.00 to $7.72	$4.13 to $12.98
Dividend Yield	0.00%	0.00%
Expected Volatility	69.8%	60%
Risk-free interest rate	2.0%	1.44% - 1.83%
Expected Life	6.93 to 7 years	7 years

Stock-based compensation expense related to stock options for employees was $129,000 and $237,000 for the three and six months ended June 30, 2015, respectively, and was $250,000 for the three and six months ended June 30, 2014. We are also required to estimate forfeitures at the time of grant, and revise those estimates in subsequent periods if actual forfeitures differ from our estimates. We use historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. To the extent that actual forfeitures differ from our estimates, the difference is recorded as a cumulative adjustment in the period the estimates were revised. For the three and six months ended June 30, 2015, there was no forfeiture rate applied as there have been very minimal forfeitures since the grant of awards and we do not expect to incur any for those shares currently awarded.

For stock options paid in consideration of services rendered by non-employees, we recognize compensation expense in accordance with the requirements of ASC 505-50. Non-employee stock option grants that do not vest immediately upon grant are recorded as an expense over the vesting period. At the end of each financial reporting period prior to performance, the value of these stock options, as calculated using the Black-Scholes option valuation model, is determined, and compensation expense recognized or recovered during the period is adjusted accordingly. Since the fair market value of stock options granted to non-employees is subject to change in the future, the amount of the future compensation expense is subject to adjustment until the

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common stock options are fully vested. Stock-based compensation expense related to stock options for consultants was $17,000 for the six months ended June 30, 2015 and was $212,000 for the three and six months ended June 30, 2014. The decline in the market price of our common stock resulted in the reduced value of the stock options for the three months ended June 30, 2015 and we recorded a recovery of expense of $2,000 related to consultant stock options.

Stock Option Award Activity

The following is a summary of our stock option activity during the six months ended June 30, 2014.

	Number of Stock Options	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value	Weighted Average Remaining Life In Years	Total Grant Date Fair Value
Outstanding, January 1, 2014	—	$—	$—	—	$—
Granted	376,500	6.00	4.01	9.91	1,525,415
Exercised	—	—	—	—	—
Forfeited	—	—	—	—	—
Outstanding, June 30, 2014	376,500	$6.00	$4.01	9.91	$1,525,415
Exercisable, January 1, 2014	—	$—	$—	—	$—
Vested	106,891	6.00	4.01	9.91	461,576
Exercised	—	—	—	—	—
Forfeited	—	—	—	—	—
Exercisable, June 30, 2014	106,891	$6.00	$4.01	9.91	$461,576

The following is a summary of our stock option activity during the six months ended June 30, 2015:

	Number of Stock Options	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value	Weighted Average Remaining Life In Years	Total Grant Date Fair Value
Outstanding, January 1, 2015	491,200	$6.13	$4.14	9.42	$2,034,000
Granted	70,000	8.84	5.24	9.74	367,000
Exercised	—	—	—	—	—
Forfeited	(1,200)	8.06	5.19	—	(6,000)
Outstanding, June 30, 2015	560,000	$6.46	$4.28	9.03	$2,395,000
Exercisable, January 1, 2015	142,895	$6.02	$4.01	9.41	$574,000
Vested	72,222	6.48	4.22	8.79	278,000
Exercised	—	—	—	—	—
Forfeited	—	—	—	—	—
Exercisable, June 30, 2015	215,117	$6.17	$4.08	8.87	$852,000

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The following table presents information related to stock options outstanding and exercisable at June 30, 2015:

Stock Options Outstanding		Stock Options Exercisable	
Exercise Price	Outstanding Number of Stock Options	Weighted Average Remaining Life In Years	Exercisable Number of Stock Options
$4.13 – $6.00	384,000	8.85	191,110
$6.49 – $6.97	47,500	9.19	8,753
$7.20 – $8.06	98,500	8.83	13,378
$11.44 – $12.98	30,000	9.65	1,876
	560,000	8.87	215,117

As of June 30, 2015, there was $1.4 million of unrecognized compensation expense related to unvested employee stock option, which is expected to be recognized over a weighted-average period of approximately 2.9 years. There was no aggregate intrinsic value of outstanding stock options and options vested as of June 30, 2015 as there were no stock options outstanding or vested which represent stock options whose exercise price was less than the closing fair market value of our common stock on June 30, 2015 of $2.98 per share.

Restricted Stock Units Activity

We account for restricted stock units issued to employees at fair value, based on the market price of our stock on the date of grant, net of estimated forfeitures. The fair value of non-employee restricted stock units awarded are remeasured as the awards vest, and the resulting increase in fair value, if any, is recognized as expense in the period the related services are rendered. During the three and six months ended June 30, 2015, we recorded $175,000 and $421,000 respectively, of stock-based compensation related to the restricted stock unit shares that have been issued to-date. During the three and six months ended June 30, 2014, we recorded $39,000 of stock-based compensation related to restricted stock units. Shares vested during the three and six months ended June 30, 2015 were 6,411 shares and 26,919 shares, respectively, of which 1,941 shares and 4,341 shares, respectively, were surrendered by the employees for payment of payroll tax withholding liabilities. Shares vested during the three and six months ended June 30, 2014 were 6,410 shares, of which 1,381 were surrendered by the employees for payment of payroll tax withholding liabilities.

A summary of restricted stock unit activity for the six months ended June 30, 2015 is as follows:

	Number of Restricted Share Units	Weighted-Average Grant-Date Fair Value
Outstanding at January 1, 2015	131,267	$6.00
Granted	212,403	7.40
Vested	(26,919)	6.42
Cancelled	—	—
Outstanding at June 30, 2015	316,751	$6.90

As of June 30, 2015, there was $1.8 million of unrecognized compensation expense related to unvested employee restricted stock unit agreements which is expected to be recognized over a weighted-average period of approximately 3.0 years. For restricted stock unit awards subject to graded vesting, we recognize compensation cost on a straight-line basis over the service period for the entire award.

Performance Awards

For 2015 we have put in place a performance based bonus program which identifies five specific performance objectives to be accomplished during 2015 for all employees. The awards contain a combination of service conditions and performance conditions based on the achievement of specified performance thresholds approved by the board.

The performance bonus amounts will be based on each individual's salary paid during the year multiplied by the bonus multiplier percentage ranging from 6.67% to 13.34% per objective plus an additional 10% bonus for non-executive employees

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and a multiplier range from 16.67% to 25.00% per objective for the executive employees. The performance bonus will be paid in the form of restricted stock units which will vest half on the issuance date and the remaining half on January 1, 2017. The number of shares granted to each employee will be determined based on the performance bonus amount divided by the 10-day average stock price prior December 31, 2015. The grant date is expected to be in the first quarter of 2016. We recognize stock-based compensation expense for restricted stock units with performance conditions based on the probability of the performance condition being met, net of estimated pre-vesting forfeitures. For the three and six months ended June 30, 2015, we recorded $99,000 and $196,000, respectively, of stock-based compensation which represents one-quarter of one-half and one-quarter, respectively, of the estimated performance bonus amount. The estimated performance bonus amount has been recorded, as the achievement of a portion of the performance conditions were considered probable.

Total equity-based compensation cost recorded in the condensed consolidated statements of operations, which includes the value of stock options and restricted stock units issued to employees, directors and non-employees for services and excludes the performance bonus accrual and warrant consultant cost, is allocated as follows:

	Three Months Ended June 30, 2014	Three Months Ended June 30, 2015	Six Months Ended June 30, 2014	Six Months Ended June 30, 2015
Research and development				
Employees	$166,000	$131,000	$166,000	$307,000
Non-employees	45,000	2,000	45,000	19,000
General and administrative				
Employees and directors	108,000	168,000	108,000	328,000
Non-employees	181,000	1,000	181,000	21,000
	$500,000	$302,000	$500,000	$675,000

NOTE 6—FAIR VALUE MEASUREMENTS AND DERIVATIVE INSTRUMENTS

We measure our financial assets and liabilities at fair value. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., exit price) in an orderly transaction between market participants at the measurement date. Additionally, we are required to provide disclosure and categorize assets and liabilities measured at fair value into one of three different levels depending on the assumptions (i.e., inputs) used in the valuation. Level 1 provides the most reliable measure of fair value while Level 3 generally requires significant management judgment. Financial assets and liabilities are classified in their entirety based on the lowest level of input significant to the fair value measurement. The fair value hierarchy is defined as follows:

Level 1—Valuations are based on unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2—Valuations are based on quoted prices for similar assets or liabilities in active markets, or quoted prices in markets that are not active for which significant inputs are observable, either directly or indirectly.

Level 3—Valuations are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement. Inputs reflect management’s best estimate of what market participants would use in valuing the asset or liability at the measurement date.

Our common stock purchase warrants issued in conjunction with debt and consulting services are detachable, or free standing, instruments. In addition, we have recorded a derivative liability associated with the conversion feature in our Senior Convertible Note. We estimate fair values of these warrants and derivative liabilities utilizing Level 3 inputs for all classes of warrants and derivative liabilities issued. Other than the Financing Warrant and Senior Convertible

Note derivative liability, we used the Black-Scholes option valuation technique as it embodies all of the requisite assumptions (including trading volatility, remaining term to maturity, market price, strike price, and risk free rates) necessary to fair value these instruments. To determine the value of the Financing Warrant and Senior Convertible Note derivative liability, we used a Monte Carlo option-pricing model, which takes into consideration the market values of comparable public companies, considering among other factors, the use of multiples of earnings, and adjusted to reflect the restrictions on the ability of our shares to trade in an active market. We determined that as the Financing Warrant and debt conversion can only be exercised upon the probability of satisfying a performance condition such as a Qualifying IPO or Fundamental Transaction, as provided for in the applicable instrument, and thus a closed-form model such as the Black-Scholes option valuation model would not be appropriate. (See Note 4).

The following assumptions were used in the Monte Carlo option-valuation model to determine the fair value of the Financing Warrant and Senior Convertible Note derivative liability during the three and six months ended June 30, 2014:

	Expected Life (Years)	Risk Free Rate	Volatility	Probability of a Capital Raise
Financing Warrant	6.25	2.09%	69.9%	0.00%
Senior Convertible Note Derivative Liability	0.5	0.13%	96.3%	80% – 95%

The following assumptions were used in the Black-Scholes option valuation model to determine the fair value of the warrant liabilities:

	March 31, 2014	IPO Date
Assumptions:		
Risk-free interest rate	1.32% - 2.02%	1.25% - 2.31%
Expected dividend yield	0.00%	0.00%
Expected volatility	64.3% - 69.8%	64.0% - 69.6%
Expected term (in years)	3.83 – 6.25	3.58 – 5.95

We used a fair value per share of our common stock of $6.00 as of the IPO Date to determine the fair value of derivative and warrant liabilities.

We estimated the fair value of our warrants and Senior Convertible Note derivative at the time of issuance and subsequently remeasured the fair value using the Black-Scholes option valuation model or Monte Carlo option-pricing model as discussed above, at each reporting date through the IPO Date, using the following inputs: the risk-free interest rates; the expected dividend rates; the remaining expected life of the warrants; and the expected volatility of the price of the underlying common stock. Under the Monte Carlo option-pricing model we estimated the fair value of the Senior Convertible Note derivative liability and Financing Warrant liability at the time of issuance and subsequent remeasurement dates considering the probability of achieving a milestone, the cost of capital, and the estimated time period the right would be outstanding. The estimates were based, in part, on subjective assumptions and could differ materially following the measurement date (see Note 4). Changes to these assumptions as well as our stock price on the reporting date could have had a significant impact on the fair value of the warrant liabilities until the IPO Date.

As a result of the expiration of the redemption and put option features included in the Bridge Warrants, Consulting Warrant and Financing Warrant as of the IPO Date, under accounting rules, these warrant liabilities are no longer classified as liabilities. There are no warrant liabilities or other liabilities to be measured at fair value on a recurring basis as of June 30, 2015.

The following table provides a reconciliation of all liabilities measured at fair value using Level 3 significant unobservable inputs as of June 30, 2014:

	Warrant Liabilities(1)	Senior Convertible Note Derivative Liability(2)
Balance at January 1, 2014	$3,276,000	$5,057,000

Change in fair value	382,000	1,633,000
Write-off due to conversion and IPO	(3,658,000)	(6,690,000)
Balance at June 30, 2014	$—	$—

(1) The change in the fair value of the warrants was recorded as a gain of $252,000 and a reduction of $(382,000) to other income in the condensed consolidated statement of operations for the three and six months ended June 30, 2014, respectively. Due to the expiration of the redemption and put option features included in the Bridge Warrants, Consulting Warrant and Financing Warrant as of the IPO Date, these warrant liabilities were recorded as an increase of $3.7 million to additional paid-in capital in the consolidated balance sheet as of December 31, 2014. There were no warrant liabilities as of June 30, 2015.

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(2) The change in the fair value of the senior convertible note derivative liability was recorded as a reduction to other income (expense) in the condensed consolidated statement of operations of $0 and ($1.6 million) for the three and six months ended June 30, 2014, respectively. The extinguishment of the senior convertible note derivative liability was recorded as an increase of $5.5 million to additional paid-in capital and a gain of $1.2 million to other income in the consolidated statement of operations for the year ended December 31, 2014. There were no derivative liabilities as of June 30, 2015.

NOTE 7— COMMITMENT AND CONTINGENCIES

Commitments—In October 2013, we signed a lease for new office space for our corporate headquarters, and moved into the new location in the first quarter of 2014. The lease had a term of 38 months and a rental cost of approximately $5,412 per month, increasing 3% annually after the first fourteen months. In addition, our share of building operating costs were estimated to be $2,101 per month. In April 2014, we amended the lease to add additional space which increased our rent to $8,286 per month beginning August 1, 2014 plus estimated monthly operating costs of $3,154 and extended the lease term through July, 2017. We have a renewal option for an additional 3 years term. The original lease included a tenant improvement allowance of $72,000 and the amended lease included an additional tenant improvement allowance of $38,000. The allowances were used to construct our office build-out and have been capitalized as leasehold improvements and construction-in-process as of December 31, 2014 and as leasehold improvements as of June 30, 2015 as construction has been completed. The capitalized costs are being amortized over the amended lease term through July 2017.

In November 2013, we signed a lease for our satellite development office in Burlingame, CA. The lease had a two-year term, and rental costs of approximately $4,169 per month. In May 2015, we renewed the lease for a one year period expiring November 30, 2016 with rental costs of $4,925 per month.

Rent expense related to our facilities and equipment for the three months ended June 30, 2014 and June 30, 2015 was $26,000 and $38,000, respectively and for the six months ended June 30, 2014 and June 30, 2015 was $51,000 and $75,000, respectively.

Legal Proceedings—We are occasionally involved in legal proceedings and other matters arising from the normal course of business. Beginning on March 17, 2015, three putative class action lawsuits were commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California. The three lawsuits, which are described below, each purport to assert claims under the federal securities laws based on similar allegations. As described below, on June 9, 2015, the court entered an order consolidating these three putative class action lawsuits into one consolidated action; however, plaintiffs in the consolidated action have not yet filed a consolidated complaint.

On March 17, 2015, a putative class action lawsuit was commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California, captioned John Paggos v. Resonant Inc., et al., No. 2:15-cv-01970. The plaintiff alleges that the Company and the individual defendants violated Section 10(b) of the Securities Exchange Act of 1934 (the “Exchange Act”) and Rule 10b-5 promulgated thereunder, and that the individual defendants violated Section 20(a) of the Exchange Act. The plaintiff purports to be acting on behalf of a class consisting of purchasers or acquirers of our common stock between August 14, 2014 and February 26, 2015 (the “Paggos Class Period”). The plaintiff alleges that, as a result of the defendants’ allegedly false and/or misleading statements and/or omissions concerning our business, operations, prospects and performance, our common stock traded at artificially inflated prices throughout the Paggos Class Period. The plaintiff seeks compensatory damages and fees and costs, among other relief, but has not specified the amount of damages being sought in the action.

On March 19, 2015, a putative class action lawsuit was commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California, captioned John DeVouassoux v. Resonant Inc., et al., No. 2:15-cv-02054. The plaintiff alleges that the Company and the individual defendants violated Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder, and that the individual defendants violated Section 20(a) of the Exchange Act. The plaintiff purports to be acting on behalf of a class consisting of purchasers or acquirers of our common stock between November 6, 2014 and February 26, 2015 (the "DeVouassoux Class Period"). The plaintiff alleges that, as a result of the defendants' allegedly false and/or misleading statements and/or omissions concerning our financial well-being and prospects, our common stock traded at artificially inflated prices throughout the DeVouassoux Class Period. The plaintiff seeks compensatory damages and fees and costs, among other relief, but has not specified the amount of damages being sought in the action.

On March 31, 2015, a putative class action lawsuit was commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California, captioned Ramon Arias v. Resonant Inc., et al., No. 2:15-cv-02369. Later the same day, an amended complaint was filed. The plaintiff alleges that the Company and the

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individual defendants violated Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder, and that the individual defendants violated Section 20(a) of the Exchange Act. The plaintiff purports to be acting on behalf of a class consisting of purchasers or acquirers of our common stock between August 14, 2014 and February 26, 2015 (the "Arias Class Period"). The plaintiff alleges that, as a result of the defendants' allegedly false and/or misleading statements and/or omissions concerning our business, operations, prospects and performance, our common stock traded at artificially inflated prices throughout the Arias Class Period. The plaintiff seeks compensatory damages and fees and costs, among other relief, but has not specified the amount of damages being sought in the action.

On June 9, 2015, the court entered an order consolidating the Paggos, DeVouassoux and Arias actions into one consolidated action, In re Resonant Inc. Securities Litigation, Case No. 15-cv-01970 SJO (VBKx). On August 7, 2015, the court entered an order appointing William Haskins and Brent Kaneshiro as co-lead plaintiffs in the consolidated action. The court has set a schedule under which co-lead plaintiffs are anticipated to file a consolidated amended complaint no later than September 21, 2015.

We deny the material allegations of these three actions and intend to defend them vigorously. We have directors' and officers' liability insurance, which will be utilized in the defense of these matters. As of June 30, 2015, we have incurred legal expenses of approximately $22,000 and expect to incur some costs to defend these suits in the future. The liability insurance may not cover all of the future liabilities we may incur in connection with the foregoing matters.

Legal fees and other costs associated with such actions are expensed as incurred. We assess, in conjunction with our legal counsel, the need to record a liability for litigation and contingencies. Litigation accruals are recorded when and if it is determined that a loss related matter is both probable and reasonably estimable. Material loss contingencies that are reasonably possible of occurrence, if any, are subject to disclosure. Based on the very early stage of litigation for the cases referred to above, it is not possible to estimate the amount or range of possible loss that might result from an adverse judgment or a settlement of these matters. We will evaluate developments in legal proceedings and other matters on a quarterly basis. As of June 30, 2014 and June 30, 2015, there was no litigation or contingency with at least a reasonable possibility of a material loss. No losses have been recorded during the three and six months ended June 30, 2014 and June 30, 2015, respectively, with respect to litigation or loss contingencies.

NOTE 8—SUBSEQUENT EVENTS

We evaluated subsequent events through August 13, 2015, the date of issuance of the condensed consolidated financial statements for the three and six months ended June 30, 2015.

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Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The words "believe," "may," "will," "potentially," "estimate," "continue," "anticipate," "intend," "could," "would," "project," "plan," "expect" and similar expressi convey uncertainty of future events or outcomes are intended to identify forward-looking statements. These forward-looking statements include, but are not limited to, statements 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 IPO 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;
- our ability to maintain our competitive technological advantages against competitors in our industry and the related costs associated with defending 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;
- our expectations concerning our relationships with our customers and other third parties and our customers' relationships with their manufacturers;
- 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.

These forward-looking statements speak only as of the date of this Form 10-Q and are subject to uncertainties, assumptions and business and economic risks. As such, our actual results could differ materially from those set forth in the forward-looking statements as a result of the factors set forth below in Part II, Item 1A, "Risk Factors," and in our other reports filed with the Securities and Exchange Commission. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for us to predict all risks, nor can we assess the impact

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of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Form 10-Q may not occur, and actual results could differ materially and adversely from those anticipated or implied in our forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this Form 10-Q to conform these statements to actual results or to changes in our expectations, except as required by law.

The following discussion should be read in conjunction with our unaudited condensed consolidated financial statements and notes thereto appearing elsewhere in this Quarterly Report on Form 10-Q with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

Overview

Resonant is a late-stage development company creating innovative filter designs for radio frequency, or RF, front-ends for the mobile device industry. The RF front-end is the circuitry in a mobile device responsible for analog signal processing and is located between the device's antenna and its digital baseband. We use a fundamentally new technology called 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. We are using ISN to develop new classes of filter designs.

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 modules that incorporate our designs. We currently do not intend to manufacture or sell any physical products or operate as a contract design business for a fee.

Our inception date is May 29, 2012. We commenced business on July 6, 2012 and completed our initial public offering, or IPO, on May 29, 2014.

Commercialization Plan

We plan to commercialize our technology by creating filter designs that address the problems created by the growing number of frequency bands in the RF front-end of mobile devices. First, 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. Second, we are developing tunable filter designs to replace multiple filters. 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.

Single Band Designs

We completed our first single-band filter design (a duplexer) for band 3 in the first quarter of 2015. This project has been our principal focus from inception through the first quarter of 2015, when we started a second project. We developed the band 3 duplexer using commercial product specifications provided under a development agreement with a prospective customer. The prospective customer terminated the formal development agreement in the first quarter of 2015 and informed us that our design did not meet all their specifications.

We are continuing work on this project, but the prospective customer has advised us to work through the filter manufacturer, or fabrication facility or fab. The first generation of this band 3 filter has been completed and we consider the band 3 filter design to have competitive cost, size and performance characteristics. Additionally, in July 2015 we completed the second generation of this band 3 filter at a reduced size and with improved performance. We are collaborating with the filter manufacturer to submit the second generation band 3 filter design for consideration by our prospective customers and we are providing the fab with manufactured parts for testing.

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We also believe the first project has enabled us to expand our ISN technology and state-of-the-art filter design capabilities and demonstrate this capability by producing a commercially viable SAW duplexer for a typically BAW band. We are presenting our current design to other prospective customers and providing them with manufactured parts for testing. The ability to provide manufactured parts for testing is a significant advancement in our marketing efforts.

In the first quarter of 2015, we started a development project with a second customer for the design of our next single-band RF filter, another duplexer. This duplexer is for a different high-volume band than our first duplexer. We have received the first set of manufactured parts of our design for review and testing, following which we expect revisions to the design prior to completion. Our objective is to develop a new duplexer design for this second customer to market to RF front-end manufacturers and mobile device OEMs. The design, which is estimated to take less than a year to develop, is intended to replace a BAW filter with a less expensive SAW filter. The second customer has not committed to use the resulting design and terms of a license have not been finalized as of June 30, 2015.

Tunable Designs

We believe that our ISN technology will enable us to produce tunable filters. These tunable filters are electronically programmed in real time for different RF frequency bands so that one filter can do the work of many and therefore replace multiple filters and significantly lower the cost and size of RF front-ends. Several prospective customers have expressed interest and we are now developing a prototype tunable filter to demonstrate our value proposition. We expect to have demonstration parts available for assessment by these prospective customers with the goal of securing a lead customer thereafter.

Plan of Operation

We plan to pursue filter design projects with potential customers and other strategic partners. These types of arrangements may subsidize filter design costs, as well as offer complementary technology, market intelligence and other avenues to revenue. We intend to retain ownership of our technology, designs and related improvements. We expect to pursue development of multiple designs for multiple customers, and grant each customer a royalty-bearing license to a specific design.

We are using the net proceeds from our IPO for product development to commercialize our technology, research and development, the development of our patent strategy and expansion of our patent portfolio, as well as for working capital and other general corporate purposes. Our anticipated costs include employee salaries and benefits, compensation paid to consultants, capital costs for research and other equipment, costs associated with development activities including travel and administration, legal expenses, sales and marketing costs, general and administrative expenses, and other costs associated with a late-stage, publicly-traded technology company. However, this is highly dependent on the nature of our development efforts and our success in commercialization. We anticipate adding employees for research and development, as well as general and administrative functions, to support our efforts. We expect to incur consulting expenses related to technology development and other efforts as well as legal and related expenses to protect our intellectual property.

The amounts that we actually spend for any specific purpose may vary significantly and will depend on a number of factors including, but not limited to, our expected cash resources, the pace of progress of our commercialization and development efforts, actual needs with respect to product testing, development and research, market conditions, and changes in or revisions to our marketing strategies. In addition, we may invest in complementary products, technologies or businesses.

We have earned no revenue since inception, and our operations have been funded with initial capital contributions, proceeds from the sale of equity securities and debt. We have incurred accumulated losses totaling \$25.6 million from inception through June 30, 2015. These losses are primarily the result of research and development costs associated with commercializing our technology, combined with start-up and operating costs including costs related to the financings and being a public company. We expect to continue to incur substantial costs for commercialization of our technology on a continuous basis because our business model involves developing and licensing custom filter designs.

Our principal sources of liquidity as of June 30, 2015 consist of existing cash balances and investments of \$9.8 million, and we are currently using approximately \$2.0 million in cash per quarter in operating and investment activities. We believe our current resources will provide sufficient funding for planned operations through the first half of 2016. We have determined that additional capital from the sale of equity securities or the incurrence of indebtedness and, ultimately, the achievement of significant operating revenues will be required for us to continue operations through 2016 and beyond. We have had discussions with potential customers that may provide funding through debt and/or equity instruments or the licensing of future filter designs. There can be no assurance that additional financing will be available to us from potential customers or others on acceptable terms or at all. Additionally, if we issue additional equity securities to raise funds, whether to potential

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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. 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.

Critical Accounting Policies and Estimates

Our discussion and analysis of financial condition and results of operations is based upon our condensed consolidated financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. Certain accounting policies and estimates are particularly important to the understanding of our financial position and results of operations and require the application of significant judgment by our management or can be materially affected by changes from period to period in economic factors or conditions that are outside of our control. As a result, they are subject to an inherent degree of uncertainty. In applying these policies, our management uses their judgment to determine the appropriate assumptions to be used in the determination of certain estimates. Those estimates are based on our historical operations, our future business plans and projected financial results, the terms of existing contracts, our observance of trends in the industry, information provided by our customers and information available from other outside sources, as appropriate.

A description of our critical accounting policies that represent the more significant judgments and estimates used in the preparation of our financial statements was provided in the Management's Discussion and Analysis of Financial Condition and Results of Operations section of our Annual Report on Form 10-K for the year ended December 31, 2014. There have been no material changes in these critical accounting policies since December 31, 2014.

Recently Issued and Adopted Accounting Pronouncements

We have reviewed all of the recent accounting pronouncements and have determined that they have not or will not have a material impact on our condensed consolidated financial statements, or do not apply to our operations.

Results of Operations

Comparison of Three Months Ended June 30, 2014 and 2015

Research and Development. Research and development expenses consist of the direct engineering and other costs associated with the development and commercialization of our technology, including the development of filter designs for our customers. These consist primarily of the cost of employees and consultants, and to a lesser extent costs for equipment, software and supplies. We also include the costs for our intellectual property development program under research and development. This program focuses on patent strategy and invention extraction.

Research and development expenses increased $125,000, from $969,000 in the second quarter of 2014 to $1.1 million in the second quarter of 2015. The increase was the result of the increased payroll, benefit costs, stock-based compensation expenses, consulting costs and development costs related to increased activity on our various duplexer designs under development.

General and Administrative Expenses. General and administrative expenses include salaries, taxes, employee benefits and stock-based compensation for the executives and administrative staff. It also includes expenses for corporate overhead such as rent for our facilities, travel expenses, telecommunications, investor relations, insurance, professional fees and business consulting fees. We hired a chief financial officer and a controller in June 2014 and vice-president in September 2014. We hired one additional administrative person in May 2015.

General and administrative expenses increased $488,000, from $455,000 in the second quarter of 2014 to $943,000 in the second quarter of 2015. The increase was due primarily to increased payroll, benefit costs, stock-based compensation, directors' and officers' insurance and accounting expenses. We anticipate that our general and administrative expenses will likely continue to increase as a result of planned growth and the costs associated with operating as a public company. Additionally, we anticipate increased expenses related to the stock compensation, legal, audit, regulatory and investor relations services associated with maintaining compliance with Securities and Exchange Commission and NASDAQ requirements, director and officer insurance premiums and other costs associated with operating as a public company. We will incur additional costs throughout this year associated with the current securities litigation lawsuits filed against us.

Depreciation and Amortization Expense. Depreciation and amortization expense increased by $54,000, from $62,000 in second quarter of 2014 to $116,000 in second quarter of 2015, primarily as a result of our increases in fixed assets associated with our new corporate headquarters and new office equipment and machinery associated with the increase in employees in 2015.

Interest Income. Interest income increased by $6,000, from $2,000 interest income in the second quarter of 2014 to $8,000 in the second quarter of 2015 primarily due to the increased cash and investment balances from the net proceeds of the IPO. We expect interest income to fluctuate in proportion to our cash balances.

Interest Expense. Interest expense for 2014 consists of accrued interest on debt instruments, the amortization of debt discounts and interest on financed insurance contracts. We valued our debt instruments and their various features and derivatives at fair value, and the resulting adjustments required debt discounts to these values that were booked at lower than face value. The debt discounts were being amortized over the expected life of the debt instrument. However, the remaining debt discount and debt issuance costs were expensed in June 2014 due to the conversion of all notes into common stock in connection with our IPO.

Interest expense decreased by $2.1 million, from $2.1 million in the second quarter of 2014 to none in the second quarter of 2015. The decrease is due to the conversion the Senior Convertible Notes and the Subordinated Convertible Note into common stock in June 2014 in connection with our IPO. Debt discounts and deferred financing cost amortizations ceased upon conversion of these notes.

Fair Value Adjustments to Warrant and Derivative Liabilities. We recorded all of our warrant and derivative liabilities at their fair value at issuance and adjusted the liabilities quarterly to reflect changes in their fair value. Periodic adjustments to the fair value of these liabilities generated non-cash expense if they increased and non-cash income if they decreased. The fair value of these liabilities fluctuated significantly from quarter to quarter until the IPO Date.

There was a decrease of the fair value of the warrant and derivative liabilities during the second quarter of 2014 resulting in non-cash income of $252,000 for the second quarter of 2014. The decrease in the fair value of these liabilities in 2014 is primarily due to a decrease in our share price and the related enterprise valuation. The IPO triggered (a) the conversion of all debt into equity and (b) the expiration of the redemption and put option features included in the Bridge Warrants, Financing Warrant and Consulting Warrant. These events eliminated all warrant and derivative liabilities as of May 29, 2014. Consequently, we ceased recording any further quarterly adjustments after that date for the fair value of warrant or derivative liabilities or any associated gain or loss from such adjustments.

Other Income. Other income generally consists of non-cash gains or losses from changes in the derivative liability associated with our Senior Convertible Notes. The notes were converted into common stock in the second quarter of 2014 in connection with our IPO. The derivative liability balance was accounted for as an extinguishment of debt with a portion recognized as a gain and classified in other income the second quarter of 2014. Consequently, we did not incur any further charges associated with fluctuations in the fair value of the derivative liability after the second quarter of 2014.

Other income in the second quarter of 2014 consisted of a $1.2 million non-cash gain from the extinguishment of the derivative liability associated with our Senior Convertible Notes. Due to the conversion of these notes, the derivative liability balance was accounted for as an extinguishment of debt with a portion recognized as a gain and classified in other income for the second quarter of 2014. There were no items in other income for the second quarter of 2015.

Income Taxes. We have no revenues and are currently operating at a loss. Consequently, our only tax liabilities for both periods were for minimum taxes in the States where we conduct business.

Comparison of Six Months Ended June 30, 2014 and 2015

Research and Development. Research and development expenses increased $687,000, from $1.4 million in the first six months of 2014 to $2.1 million in the first six months of 2015. The increase was the result of the increased payroll, benefit costs, stock-based compensation expenses, consulting costs and development costs related to increased activity on our duplexer designs under development.

General and Administrative Expenses. General and administrative expenses increased $1.1 million, from $977,000 in the first six months of 2014 to $2.1 million in the first six months of 2015. The increase was due primarily to increased payroll, benefit costs, stock-based compensation, directors' and officers' insurance, accounting expenses and the costs associated with operating as a public company since our IPO.

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Depreciation and Amortization Expense. Depreciation and amortization expense increased by $152,000, from $75,000 in first six months of 2014 to $227,000 in first six months of 2015, primarily as a result of our increases in fixed assets associated with our new corporate headquarters and new office equipment and machinery associated with the increase in employees in 2015.

Interest Income. Interest income increased by $14,000, from $2,000 interest income in the first six months of 2014 to $16,000 in the first six months of 2015 primarily due to the increased cash balances and investments from the net proceeds of the IPO. We expect interest income to fluctuate in proportion to our cash balances.

Interest Expense. Interest expense decreased by $2.8 million, from $2.8 million in the first six months of 2014 to none in the first six months of 2015. The decrease is due to the conversion the Senior Convertible Notes and the Subordinated Convertible Note into common stock in June 2014 in connection with our IPO. Debt discounts and deferred financing cost amortizations ceased upon conversion of these notes.

Fair Value Adjustments to Warrant and Derivative Liabilities. There was an increase of the fair value of the warrant and derivative liabilities during the first six months of 2014 resulting in non-cash expense of $2.0 million for the first six months of 2014. The increase in the fair value of these liabilities in 2014 is primarily due to an increase in our share price and the related enterprise valuation. The IPO triggered (a) the conversion of all debt into equity and (b) the expiration of the redemption and put option features included in the Bridge Warrants, Financing Warrant and Consulting Warrant. These events eliminated all warrant and derivative liabilities as of IPO Date. Consequently, we ceased recording any further quarterly adjustments after that date for the fair value of warrant or derivative liabilities or any associated gain or loss from such adjustments.

Other Income. Other income in the first six months of 2014 consisted of a $1.2 million non-cash gain from the extinguishment of the derivative liability associated with our Senior Convertible Notes. Due to the conversion of these notes, the derivative liability balance was accounted for as an extinguishment of debt with a portion recognized as a gain and classified in other income for the second quarter of 2014. There were no items in other income in the first six months of 2015.

Income Taxes. We have no revenues and are currently operating at a loss. Consequently, our only tax liabilities for both periods were for minimum taxes in the States where we conduct business.

Liquidity and Capital Resources

Financing Activities

We have earned no revenue since inception. Our operations have been funded with initial capital contributions and proceeds from the sale of equity securities and debt.

We began operations in July 2012 with initial capital contributions from our founders and Superconductor Technologies Inc. The founders contributed $200,000 and agreed to work full-time without pay until we secured adequate funding. Superconductor Technologies contributed a patent portfolio, software, equipment, temporary office space and an early version of our first development agreement. The founders received Class B units in Resonant LLC, but later exchanged their Class B units for common stock of Resonant Inc. Superconductor Technologies received Class C units in Resonant LLC, but later exchanged its Class C units for the $2.4 million Subordinated Convertible Note of Resonant Inc.

The Bridge Loans provided $200,000 of additional funding during the first and second quarters of 2013.

We raised \$6.3 million of net proceeds from the sale of Senior Convertible Notes in June 2013, and we used part of the proceeds to repay the Bridge Loans. In June 2014, we sold 3,105,000 shares of common stock in our IPO generating net proceeds of \$16.2 million.

We had current assets of \$10.0 million and current liabilities of \$775,000 at June 30, 2015, resulting in working capital of \$9.2 million. This compares to working capital of \$16.6 million at June 30, 2014 and \$13.2 million at December 31, 2014. The change in working capital is primarily the result of the use of cash in our normal business operations.

Our principal sources of liquidity consist of existing cash balances and investments of \$9.8 million at June 30, 2015, and we are currently using approximately \$2.0 million in cash per quarter in operating and investing activities. We believe our current resources will provide sufficient funding for planned operations through the first half of 2016. We have determined that

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additional capital from the sale of equity securities or the incurrence of indebtedness and, ultimately, the achievement of significant operating revenues will be required for us to continue operations through 2016 and beyond. We have had discussions with potential customers to provide funding through debt and/or equity instruments or the licensing of future filter designs. There can be no assurance that additional financing will be available to us from potential customers or others 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. Since we have no committed source of financing, we cannot assure you that we will be able to raise money as and when needed to continue our operations. 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 condensed 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.

Cash Flow Analysis

Operating activities used cash of $1.6 million in the first six months of 2014 and $3.6 million in the first six months of 2015. The increase is primarily the result of increased expenses following our IPO in June 2014 and an increase in expenses associated with being a public company. These cash uses were partially offset by non-cash expenses including stock-based compensation and depreciation and amortization. Additionally, the first six months of 2014 included significant offsets to the net loss from the fair value change in the warrant and derivative liabilities and the amortization of deferred finance costs.

Investing activities used cash of $605,000 in the first six months of 2014 and $422,000 in the first six months of 2015. The decrease of $183,000 resulted primarily from the reduction in capital expenditures from 2014 to 2015 as we had completed our office headquarters in 2014 and had no similar expense in 2015. The decrease was offset by an increase of $100,000 related to the restricted cash commitment attributable to our corporate credit cards.

Financing activities provided cash of $16.2 million in the first six months of 2014 and used cash of $45,000 in the first six months of 2015. For the 2014 period, cash provided was a result of funding from our IPO offset by IPO costs. For the 2015 period, cash used in financing activities resulted from of the payment of withholding taxes related to the issuance of common stock as compensation to employees.

Off-Balance Sheet Transactions

We do not have any off-balance sheet arrangements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not Applicable

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Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures, as defined by paragraph (e) of Rules 13a-15(f) or 15d-15(f) under the Securities and Exchange Act of 1934, as amended, designed to ensure that we are able to collect the information we are required to disclose in the reports we file with the SEC and to approve, summarize and disclose this information within the time periods specified in the rules of the SEC. Our Chief Executive Officer and Chief Financial Officer are responsible for establishing and maintaining these procedures, and, as required by the rules of the SEC, evaluate their effectiveness. Our Chief Executive Officer and Chief Financial Officer evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2015, the end of the period covered by this report, and based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective.

Changes in Internal Controls over Financial Reporting

There was no change in our internal control over financial reporting during the period ended June 30, 2015 that materially affected, or is reasonable likely to materially affect, our internal control over financial reporting.

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PART II: OTHER INFORMATION

Item 1. Legal Proceedings

On March 17, 2015, a putative class action lawsuit was commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California, captioned John Paggos v. Resonant Inc., et al., No. 2:15-cv-01970. On March 19, 2015, a putative class action lawsuit was commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California, captioned John DeVouassoux v. Resonant Inc., et al., No. 2:15-cv-02054. On March 31, 2015, a putative class action lawsuit was commenced against the Company, Terry Lingren and John Philpott, in the United States District Court for the Central District of California, captioned Ramon Arias v. Resonant Inc., et al., No. 2:15-cv-02369. Both of the Paggos and DeVouassoux actions are described in Item 3 of our Annual Report on Form 10-K for the year ended December 31, 2014, and the Arias action is described in Part II, Item 1 of our Quarterly Report on Form 10-Q for the quarter ended March 31, 2015.

On June 9, 2015, the court entered an order consolidating the Paggos, DeVouassoux and Arias actions into one consolidated action, In re Resonant Inc. Securities Litigation, Case No. 15-cv-01970 SJO (VBKx). On August 7, 2015, the court entered an order appointing William Haskins and Brent Kaneshiro as co-lead plaintiffs in the consolidated action. The court has set a schedule under which co-lead plaintiffs are anticipated to file a consolidated amended complaint no later than September 21, 2015.

Item 1A. Risk Factors

This Quarterly Report on Form 10-Q contains forward-looking statements, which are subject to a variety of risks and uncertainties. Other actual results could differ materially from those anticipated in those forward-looking statements as a result of various factors, including those set forth in the risk factors relating to our business and common stock contained in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2014. There have been no material changes to such risk factors during the three and six months ended June 30, 2015, except for the addition of the following:

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.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Use of Proceeds

On June 3, 2014, we closed our initial public offering of 3,105,000 shares of our common stock, which included 405,000 shares of common stock sold upon the full exercise of the underwriter's overallotment option. The offer and sale of all

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of the shares in the initial public offering were registered under the Securities Act pursuant to registration statements on Form S-1 (File Nos. 333-193552 and 333-196340), which were declared effective by the SEC on May 28, 2014. MDB Capital Group, LLC acted as the underwriter for the offering. The public offering price of the shares sold in the offering was $6.00 per share. The total gross proceeds from the offering to us were $18.6 million. After deducting underwriting discounts and commissions of $1.6 million and offering expenses payable by us of $0.8 million, we received approximately $16.2 million. There has been no material change in the planned use of proceeds from our initial public offering as described in our final prospectus filed with the SEC on May 29, 2014 pursuant to Rule 424(b) of the Securities Act.

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Item 6. Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File Number	Exhibit	Filing Date	Filed Herewith
3.1	Amended and Restated Certificate of Incorporation of the Registrant	8-K	001-36467	3.1	6/5/2014	
3.2	Amended and Restated Bylaws of the Registrant	8-K	001-36467	3.2	6/5/2014	
10.1	Amendment No. One to Lease, dated May 5, 2015, between the Registrant and SeaBreeze I VentureTIC					X
31.1	Certification of Principal Executive Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Principal Financial Officer Pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1#	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					X

The information in this exhibit is furnished and deemed not filed with the Securities and Exchange Commission for purposes of section 18 of the Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of Resonant Inc. under the Securities Act of 1933, as amended, or the Exchange Act of 1934, as amended, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: August 13, 2015	Resonant Inc.	
	By:	/s/ John M. Philpott John M. Philpott Chief Financial Officer (Principal Financial and Accounting Officer)