

GIGA TRONICS INC  
Form S-1  
October 17, 2018

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Registration Statement No. 333-\_\_\_\_\_

AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON OCTOBER 17, 2018

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

FORM S-1

REGISTRATION STATEMENT UNDER  
THE SECURITIES ACT OF 1933

**Giga-tronics Incorporated**  
*(Exact name of Registrant as specified in its charter)*

<b>California</b> <i>(State or other jurisdiction</i>	<b>3825</b> <i>(Primary Standard Industrial</i>	<b>94-2656341</b> <i>(I.R.S. Employer</i>
<i>of incorporation or</i>	<i>Classification Code Number)</i>	<i>Identification No.)</i>
<i>organization)</i>		

5990 Gleason Drive

Dublin, California 94568

Telephone: 925-328-4650

*(Address and telephone number of principal executive offices)*

John R. Regazzi  
Chief Executive Officer  
5990 Gleason Drive  
Dublin, California 94568  
Telephone: 925-328-4650

*(Name, address and telephone number of agent for service)*

*Copy to:*

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**Approximate Date of Commencement of Proposed Sale to the Public:** As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.



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Shares of Common Stock underlying Warrants (4)	331,636	\$ 1.15	(3)	\$381,381	\$ 46.22
Common Stock, no par value (5)	1,172,858	\$ 0.31	(6)	\$363,586	\$ 44.07
<b>TOTAL</b>	11,624,452			<b>\$4,943,467</b>	<b>\$ 599.15</b>

(1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the “Act”), the shares of common stock being registered hereunder include such indeterminate number of shares of common stock as may be issuable with respect to the shares of common stock being registered hereunder as a result of stock splits, stock dividends or similar transactions.

(2) Shares issuable upon conversion of outstanding shares of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock.

(3) Pursuant to Rule 457(g) under the Act, the offering price is based upon the respective average exercise or conversion price.

(4) Shares issuable upon exercise of outstanding warrants.

(5) Represents 600,000 shares of common stock potentially issuable as payment-in-kind dividends on the outstanding shares of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock and 572,858 shares of outstanding common stock issued upon exercise of warrants.

(6) Estimated solely for the purpose of calculating the registration fee and based on the average of the high and low sales prices of our common stock OTC Bulletin Board of \$0.31 on October 15, 2018 pursuant to Rule 457(c) under the Securities Act of 1933, as amended.

**The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.**

**The information in this preliminary prospectus is not complete and may be changed. The selling securityholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state or jurisdiction where the offer or sale is not permitted.**

**PRELIMINARY PROSPECTUS**

**SUBJECT TO COMPLETION**

**DATED OCTOBER  
17, 2018**

**11,624,452 Shares of Common Stock**

## **GIGA-TRONICS INCORPORATED**

This prospectus relates to the sale by the selling securityholders named in this prospectus (the “Selling Securityholders”) of up to 11,624,452 shares of common stock of Giga-tronics Incorporated (we, the “Company” or “Giga-tronics”), including 7,000,000 shares of common stock issuable upon conversion of our 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock, which we refer to as “Series E Shares,” 3,451,594 shares of common stock issuable upon exercise of common stock purchase warrants, 572,858 shares of common stock that we issued upon exercise of warrants and 600,000 shares of common stock potentially issuable as dividends on the Series E Shares. We will not receive any of the proceeds from the sale by the Selling Securityholders of such securities. However, we will receive proceeds from the exercise of the warrants if they are exercised for cash by the Selling Securityholders. We will bear all expenses of registration incurred in connection with this offering, but all selling and other expenses incurred by the selling shareholders will be borne by them.

Our Common Stock is quoted on the OTC Bulletin Board under the symbol GIGA.QB. The high and low bid prices for shares of our Common Stock on October 15, 2018, were \$0.37 and \$0.25 per share, respectively, based upon bids that represent prices quoted by broker-dealers on the OTC Bulletin Board. These quotations reflect inter-dealer prices, without retail mark-up, mark-down or commissions, and may not represent actual transactions.

The Selling Securityholders and any broker-dealers that participate in the distribution of the securities may be deemed to be “underwriters” as that term is defined in Section 2(a)(11) of the Securities Act of 1933, as amended.

**Investing in our common stock is highly speculative and involves a high degree of risk. You should carefully consider the risks and uncertainties described under the heading “Risk Factors” beginning on page 11 of this prospectus before making a decision to purchase our common stock.**

**NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.**

**The date of this prospectus is October 17, 2018.**

## **ABOUT THIS PROSPECTUS**

In this prospectus, unless the context suggests otherwise, unless otherwise noted, references to “the Company,” “we,” “us,” and “our” refer to Giga-tronics Incorporated and its consolidated subsidiaries.

This prospectus describes the specific details regarding this offering and the terms and conditions of the common stock being offered hereby and the risks of investing in our common stock. You should read this prospectus, any free writing prospectus and the additional information about us described in the section entitled “Where You Can Find More Information” before making your investment decision.

Neither we, nor any of our officers, directors, agents or representatives make any representation to you about the legality of an investment in our common stock. You should not interpret the contents of this prospectus to be legal, business, investment or tax advice. You should consult with your own advisors for that type of advice and consult with them about the legal, tax, business, financial and other issues that you should consider before investing in our common stock.

## **ADDITIONAL INFORMATION**

You should rely only on the information contained or incorporated by reference in this prospectus and in any accompanying prospectus supplement. No one has been authorized to provide you with different or additional information. The shares of common stock are not being offered in any jurisdiction where the offer is not permitted. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of such documents.

## **TRADEMARKS AND TRADE NAMES**

This prospectus includes trademarks which are protected under applicable intellectual property laws and are our property or the property of our subsidiaries. This prospectus also contains trademarks, service marks, trade names and/or copyrights of other companies, which are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this prospectus may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to these trademarks and trade names.

## **INDUSTRY AND MARKET DATA**

Unless otherwise indicated, information contained in this prospectus concerning our industry and the markets in which we operate, including market position and market opportunity, is based on information from our management's estimates, as well as from industry publications and research, surveys and studies conducted by third parties. The third-party sources from which we have obtained information generally state that the information contained therein has been obtained from sources believed to be reliable, but we cannot assure you that this information is accurate or complete. We have not independently verified any of the data from third-party sources nor have we verified the underlying economic assumptions relied upon by those third parties. However, assumptions and estimates of our future performance, and the future performance of our industry, are subject to numerous known and unknown risks and uncertainties, including those described under the heading "Risk Factors" in this prospectus and those described elsewhere in this prospectus, and the other documents we file with the Securities and Exchange Commission, or SEC, from time to time. These and other important factors could result in our estimates and assumptions being materially different from future results. You should read the information contained in, or incorporated by reference into, this prospectus completely and with the understanding that future results may be materially different and worse from what we expect. See the information included under the heading "Forward-Looking Statements."

## **FORWARD LOOKING STATEMENTS**

This prospectus contains forward-looking statements. These statements relate to future events or future predictions, including events or predictions relating to our future financial performance, and are based on current expectations, estimates, forecasts and projections about us, our future performance, our beliefs and management's assumptions.

They are generally identifiable by use of the words "may," "will," "should," "expect," "plan," "anticipate," "believe," "feel," "estimate," "intend," "predict," "forecast," "project," "potential" or "continue" or the negative of such terms or other variations of these words or comparable terminology. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks described under "Risk Factors" that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by such forward-looking statements. In addition to the risks described in Risk Factors, important factors to consider and evaluate in such forward-looking statements include: (i) general economic conditions and changes in the external competitive market factors which might impact our results of operations; (ii) unanticipated working capital or other cash requirements including those created by our failure to adequately anticipate the costs associated with product development and other critical activities; (iii) changes in our corporate strategy or an inability to execute our strategy due to unanticipated changes; and (iv) our failure to complete any or all sales or shipments of products or on the terms currently contemplated. In light of these risks and uncertainties, many of which are described in greater detail elsewhere in the section titled Risk Factors, we cannot assure you that the forward-looking statements contained in this prospectus will in fact transpire.

Although we believe that the expectations reflected in the forward-looking statements are reasonable as of the date of this prospectus, we cannot guarantee future results, levels of activity, performance or achievements. We will update or revise the forward-looking statements to the extent required by applicable law.





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## PROSPECTUS SUMMARY

*The following summary highlights information contained elsewhere in this prospectus. This summary may not contain all of the information that may be important to you. You should read this entire prospectus carefully, including the sections entitled “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our historical financial statements and related notes included elsewhere in this prospectus and incorporated hereby by reference. In this prospectus, unless otherwise noted or the context requires, the terms “Company,” “Giga-tronics Incorporated,” “we,” “us,” and “our” refer to Giga-tronics Incorporated and its consolidated subsidiaries.*

### **The Company**

We manufacture specialized electronics equipment for use in military defense applications. Our operations consist of two business segments, those of our subsidiary, Microsource Inc. (“Microsource”) and those of our Giga-tronics Division.

#### *Microsource*

Microsource develops YIG (Yttrium, Iron, Garnet) tuned oscillators, filters, and microwave synthesizers for use in military defense applications. Microsource’s two largest customers are prime contractors for which we develop and manufacture YIG RADAR filters used in fighter jet aircrafts. Revenues from Microsource comprised a majority of our revenues for the fiscal years ended March 31, 2018 and March 25, 2017.

#### *Giga-tronics Division*

Our Giga-tronics Division designs, manufactures and markets a family of functional test products for the RADAR and electronic warfare, or RADAR/EW, segment of the defense electronics market. Our RADAR/EW test products are used to evaluate the performance of RADAR and Electronic Warfare, or EW, systems. Giga-tronics Division customers include major prime defense contractors, the United States armed services and research institutes.

#### *Corporate Offices*

Our principal executive offices are located at 5990 Gleason Drive, Dublin, California and our telephone number at that location is (925) 328-4650. Our website address is <http://www.Giga-tronics.com>.

## **Our History**

Giga-tronics was incorporated on March 5, 1980. Our original product line consisted of general purpose parametric test products used for the design, production, repair and maintenance of products in the aerospace and telecommunications equipment marketplace. In 1998 we acquired Microsource, which develops YIG tuned oscillators, filters and microwave synthesizers for use in RADAR applications.

We believe the functional RADAR/EW test market offers greater long-term opportunities for revenue growth and improved gross margins compared to the general purpose parametric test equipment marketplace. Beginning in 2011, we chose to focus on the development of RADAR/EW defense industry products. Using technological resources and industry expertise related to RADAR developed within our Microsource division, we began to develop products for RADAR/EW test applications, which together comprise our Advanced Signal Generation and Analysis (“ASGA”) systems. We also sold or eliminated the substantial majority of our original general purpose test products between 2013 and 2016 because of lack of growth potential and poor gross margins. For example, we sold our SCPM product line in 2013; we sold our Power Meters and Amplifiers business in 2015; and we sold our Switch product line to Astronics in 2016.

We have experienced significant operating losses. Developing the ASGA product platform was more expensive and took more time than we anticipated, and the operating revenue of our Giga-tronics Division decreased as we exited our legacy test equipment businesses. We have, however, continued to see increasing operating revenue from sales of Microsource’s RADAR filter products as our customers upgraded the fighter jets’ RADAR systems under the United States Government’s RADAR Modernization Program for prior generation fighter aircraft such as the F/A-18E, F-15D and F-16 jets. In addition to providing cash to help fund the development of the ASGA product platform, the sale of our legacy general-purpose test product lines has allowed us to significantly reduce our headcount and operating expenses. For example, our operating expenses for fiscal 2018 were 15% lower than those for the 2017 fiscal year and 30% lower compared to the 2016 fiscal year.

We substantially completed the development our ASGA system and began shipping in 2016. Through March 31, 2018, we have delivered our new ASGA test systems to eight customers generating approximately \$10 million in revenue.

## **Corporate Strategy**

Our objective is to maintain our position as a sole provider of RADAR filter solutions for prior generations of fighter jet aircraft and become a leading supplier of electronic test systems to government facilities and defense prime contractors tasked with evaluating the performance of RADAR/EW systems.

We believe that several aspects of our Microwave Advanced Signal Generation and Analysis (ASGA) simulation platform are unique. The platform interface is digital and may be customized and scaled with relative ease compared to traditional test systems.

To sell our new specialized testing products, we are changing our approach to sales. We are developing a field salesforce, locating personnel near key military and OEM customers within the RADAR/EW marketplace. This salesforce will have the technical expertise needed to properly understand our customers' needs and provide the optimal solution to position our complex and innovative platform. Members of our salesforce have the security clearances required to enter classified facilities and to hold the necessary conversations with customers to understand their requirements.

Our customers include the US Navy, US Air Force and US Army and prime contractors and test directorates who are developing the devices being tested at military bases. We believe we have the opportunity to expand into new international markets with our functional RADAR/EW test solutions. To do so, we will rely on our relationships at key prime contractors and military customers in France, Israel, Italy and the United Kingdom, for example. We also expect to use sales representative organizations that have relationships with prime contractors and technical expertise in radar testing.

Microsource provides RADAR filter solutions for the F-15, F-16 and F-18 aircraft as their RADAR systems are upgraded. We expect that our filter technology will continue to be a significant source of our revenue because a number of these aircraft have yet to be upgraded. In addition, we may be able to sell our RADAR filters internationally as the RADAR systems of foreign forces' F-15, F-16 and F-18 aircraft are upgraded. We may also have the opportunity to develop and sell RADAR filters to customers for other types of aircrafts. We may also deploy technology from our RADAR/EW test platform, miniaturized and ruggedized with our chip and wire technology, to provide additional Microwave modules to the prime contractors to whom we currently provide our test solutions.

## **Recent Developments**

### ***Going Concern***

We have sustained recurring operating losses, raising substantial doubt about our ability to continue as a going concern. We incurred net losses of \$3.1 million in fiscal 2018, and \$1.5 million in fiscal 2017. These losses have contributed to an accumulated deficit of \$28.7 million as of March 31, 2018.

The Company's financial statements for all periods have been prepared assuming that we will continue as a going concern. Our continuation as a going concern is dependent upon us reducing expenses, raising additional capital to fund future operations and recognizing revenue from sales and other factors, as discussed in Note 2 to our Audited Consolidated Financial Statements as of and for the Fiscal Years Ended March 31, 2018 and March 25, 2017 attached to this prospectus. We have utilized cash in operating activities of \$1.6 million and \$945,000 during the fiscal year ended March 31, 2018 and the three months ended June 30, 2018 and we had \$748,000 cash on hand as of our most recently completed fiscal quarter, which ended June 30, 2018.

*Sales of Series E Shares*

We sold shares of our 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock, or Series E Shares, on March 26, 2018 in a private placement discussed elsewhere in this prospectus of which \$1.1 million (in gross proceeds) was received during March 2018 and \$220,000 (in gross proceeds) was received during our first fiscal quarter ended June 30, 2018, resulting in cash on hand of \$1.5 million at March 31, 2018 and \$748,000 of cash on hand as of June 30, 2018. Since June 30, 2018, we raised an additional \$531,105 of capital through September 28, 2018 through additional sales of Series E Shares and the exercise of warrants to purchase our common stock.

**THE OFFERING**

Shares of common stock offered by the Selling Securityholders	Up to 11,624,452 shares of common stock that are issuable to the Selling Securityholders. The Selling Securityholders may acquire these shares through the exercise of warrants, the conversion of Series E Shares or as payment-in-kind dividends on our Series E Shares. This total includes 572,858 shares that we recently issued upon exercise of warrants.
Shares of common stock outstanding (1)	10,939,011
Shares of common stock outstanding assuming the conversion of all outstanding shares (2)	26,654,514
Terms of the Offering	The Selling Securityholders will sell their shares at a prices based on the market price at the time of sale. The Selling Securityholders will determine when and how they sell the shares of common stock offered in this prospectus, as described in “Plan of Distribution” beginning on page 54.
Use of Proceeds	We will not receive any of the proceeds from the sale of shares by the Selling Securityholders. Any proceeds received from the exercise of warrants or options by Selling Securityholders will be used by the Company for working capital purposes. See “Use of Proceeds.”
Dividend Policy	We have never declared any cash dividends on our common stock. We currently intend to use all available funds and any future earnings for use in financing the growth of our business and do not anticipate paying any cash dividends for the foreseeable future. See “Dividend Policy.”
Trading Symbol	GIGA



Risk Factors

An investment in the Company's common stock involves a high degree of risk. You should carefully read the "Risk Factors" beginning on page 11 before making an investment decision.

(1) The number of shares of common stock outstanding is based on 10,939,011 shares of common stock issued and outstanding as of September 28, 2018 and does not include the following: 2,237,700 shares of common stock issuable upon exercise of outstanding options, 3,451,594 shares of common stock issuable upon exercise of outstanding warrants, 8,853,351 shares of common stock issuable upon conversion of all of our outstanding preferred shares, 572,858 shares recently issued upon exercise of warrants, and 600,000 shares of common stock potentially issuable as dividends on the Series E Shares.

(2) Reflects the number of shares of common stock outstanding assuming the conversion or exercise of options to purchase 2,237,700 shares of common stock, warrants to purchase 3,451,594 shares of common stock, 8,853,351 shares of common stock issuable upon conversion of all of our outstanding preferred shares, 572,858 shares recently issued upon exercise of warrants, and 600,000 shares of common stock potentially issuable as dividends on the Series E Shares that were outstanding as of September 28, 2018.

## **INCORPORATION OF CERTAIN INFORMATION BY REFERENCE**

The SEC allows use to “incorporate by reference” the information we have filed with the SEC, which means that we can disclose important information to you by referring you to those documents. The information that the Company incorporates by reference is an important part of this prospectus, and information that it files later with the SEC will automatically update and supersede this information. The documents the Company is incorporating by reference are:

Our Annual Report on Form 10-K for the year ended March 31, 2018 filed with the SEC on June 19, 2018;

Our Quarterly Report on Form 10-Q filed with the SEC on August 14, 2018;

Our Current Reports on Form 8-K filed with the SEC on July 9, 2018, August 20, 2018, August 29, 2018 and September 24, 2018; and

The description of our common stock included in the registration statement on Form 8-A filed on July 31, 1984 and any amendment or report filed for the purpose of updating such description.

Additionally, all documents filed by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) after (i) the date of the initial registration statement and prior to effectiveness of the registration statement, and (ii) the date of this prospectus and before the termination or completion of any offering hereunder, shall be deemed to be incorporated by reference into this prospectus from the respective dates of filing of such documents, except that we do not incorporate any document or portion of a document that is “furnished” to the SEC, but not deemed “filed.”

We will provide, without charge, to each person to whom a copy of this prospectus is delivered, including any beneficial owner, upon the written or oral request of such person, a copy of any or all of the documents incorporated by reference herein, including exhibits. Requests should be directed to: Attention: Investor Relations, 5990 Gleason Drive, Dublin, California 94568. The documents incorporated by reference may be accessed at our website at [www.Giga-tronics.com](http://www.Giga-tronics.com).

## **RISK FACTORS**

*Investing in our common stock involves a high degree of risk. Prospective investors should carefully consider the risks described below, together with all of the other information included or referred to in this prospectus, before purchasing shares of our common stock. There are numerous and varied risks that may prevent us from achieving our goals. If any of these risks actually occurs, our business, financial condition or results of operations may be materially adversely affected. In such case, the trading price of our common stock could decline and investors in our common stock could lose all or part of their investment.*

### **Risks Related to the Company's Business**

*Our recurring operating losses have raised substantial doubt regarding our ability to continue as a going concern.*

We have sustained recurring operating losses, raising substantial doubt about our ability to continue as a going concern. We incurred net losses of \$3.1 million in fiscal 2018, \$1.5 million in fiscal 2017 and \$287,000 for the quarter ended June 30, 2018. These losses have contributed to an accumulated deficit of \$28.7 million as of March 31, 2018 and \$27.8 million as of June 30, 2018.

The Company's financial statements for all periods have been prepared assuming the Company will continue as a going concern. As discussed in Note 2 to our Audited Consolidated Financial Statements at and for the fiscal years ended March 31, 2018 and March 25, 2017 and Note 2 to our unaudited Condensed Consolidated Financial Statements at and for the period ended June 30, 2018, each of which is included with this prospectus, our continuation as a going concern depends upon our reducing expenses, raising additional capital to fund future operations and recognizing sufficient revenue from sales. We have utilized cash in operating activities of \$1.6 million and \$945,000 during the fiscal year ended March 31, 2018 and the three months ended June 30, 2018. As of June 30, 2018, we had a total shareholders' equity of \$1,297,000 and an accumulated deficit of \$27,793,000. We sold shares of our Series E Shares on March 26, 2018 in a private placement discussed elsewhere in this prospectus, resulting in cash on hand of \$1,485,000 at March 31, 2018 and we raised an additional \$235,075 of capital through June 30, 2018 through additional sales of Series E Shares and the exercise of warrants to purchase our common stock.

Beginning in fiscal 2012, we invested primarily in the development of our Advanced Signal Generation and Analysis, or ASGA, system product platform for RADAR/EW test applications (which we formerly referred to as "Hydra") because we believe it possesses greater long-term opportunities for revenue growth and improved gross margins compared to our previous general-purpose test product lines, the substantial majority of which have been sold. Through March 31, 2018, we had spent over \$13 million towards the development of the ASGA system product platform. Although we anticipate long-term revenue growth and improved gross margins from the new ASGA product

platform, delays in completing it have also contributed to our losses. We have also experienced delays in the development of features, receipt of orders, and shipments for the new ASGA system products. These delays have significantly contributed to a decrease in working capital from \$620,000 at March 25, 2017 to (\$386,000) at March 31, 2018. Although ASGA system products have now shipped to several customers, potential delays in the refinement of further features, longer than anticipated sales cycles, or the ability to generate shipments in significant quantities, could significantly contribute to additional future losses.

To address these matters, our management has taken several actions to provide additional liquidity and reduce costs and expenses going forward. These actions are described in the section of this prospectus titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and in Note 2 to our Audited Consolidated Financial Statements at and for the fiscal year ended March 31, 2018 and March 25, 2017 attached to this prospectus

***We have significant working capital requirements and have experienced operating losses. If we continue to experience operating losses, it could have a material adverse effect on its business, financial condition and results of operations.***

We are dependent upon obtaining revenues from sales and raising additional capital to meet our working capital needs. Since 2011, we have relied on a series of private placements, legacy product line sales, and loans to fund our operating cash flow deficits. There is no assurance that we will generate the necessary net income or operating cash flows to meet our working capital requirements and pay our debts as they become due in the future due to a variety of factors and other factors discussed in this “Risk Factors” section.

To bring the RADAR/EW product platform to its full potential, we may need to seek additional working capital; however, there are no assurances that such working capital will be available, or on terms acceptable to us. We may also be required to further reduce expenses if our RADAR/EW product platform sales goals are not achieved and could, for example, choose to focus solely on our profitable Microsource component business segment to generate profits and cash from operating activities. As part of such a restructuring, management believes the microwave components which the Company developed for the RADAR/EW test products could be a source of future growth for the Microsource business segment.

To address these matters, we have taken several actions to provide additional liquidity and reduce costs and expenses going forward. These actions are described in the section of this prospectus titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and in Note 2 to our audited financial statements for the fiscal years ended March 31, 2018 and March 25, 2017 attached to this prospectus. We cannot assure you, however, that we will be able to successfully take any of these actions, including adjusting expenses sufficiently or in a timely manner, or raising additional equity, increasing borrowings or completing a financing on any terms or on terms that are acceptable to us. Our inability to take these actions as and when necessary would materially adversely affect our liquidity, results of operations, financial condition and ability to operate.

***Holders of our Series E Shares have voting rights and preferences that may limit our access to additional capital and their interests may conflict with those of our other shareholders.***

We must obtain the approval of the holders of our Series E Shares to complete certain types of transactions. For example, the Certificate of Determination for our Series E Shares prohibits us from issuing any shares having preferences that are superior to or on parity with our Series E Shares. Upon a liquidation of the Company, a sale of our Microsource business line, or sale of our Simulation and Electronic Warfare (formerly known as Hydra) business line, the holders of Series E Shares would be entitled to receive their full liquidation preference of \$37.50 per Series E Share, or approximately \$2.6 million in the aggregate from the liquidation or sale proceeds before we would be permitted to make distributions to holders of our common stock or other series of preferred shares. In addition, under the terms of our Investor Rights Agreement with the holders of our Series E Shares, we are required to obtain the approval of holders representing 66.6% of the Series E Shares to incur any additional indebtedness, other than commercial bank debt or trade debt.

These restrictions could make it more difficult to raise capital through sales of new series of preferred stock or debt without the approval of the holders of our Series E Shares, who interests may be different than those of our other shareholders who are not entitled to similar preferences or approval rights.

***Our sales cycles can be long and unpredictable and our sales efforts require considerable time and expense. As a result, our sales and revenue are difficult to predict and may vary substantially from period to period, which may cause our operating results to fluctuate significantly.***

The timing of our revenues is difficult to predict. Most of our revenues result from a limited number of relatively large orders that we receive from prime defense contractors. We spend substantial time and resources on our sales efforts without any assurance that our efforts will produce any sales. In addition, purchases of our products are frequently subject to budget constraints, multiple approvals, and unplanned administrative, processing and other delays. Even if we receive a purchase order, there may be circumstances or terms relating to the purchase that delay our ability to recognize revenue from that purchase, which makes our revenue difficult to forecast. Our financial condition may also cause potential customers to delay, postpone or decide against placing orders for our products. As a result, it is difficult to predict whether a sale will be completed, the particular fiscal period in which a sale will be completed or the fiscal period in which revenue from a sale will be recognized. For these reasons, our operating results may vary significantly from quarter to quarter.

***Our board of directors and its Audit and Nominating Committees are comprised of directors, a majority of whom are not considered to be independent under the standards of the Nasdaq Stock Market.***

The rules applicable to companies with securities listed on certain securities exchanges require that a listed company's board of directors meet certain independence standards. For example, the Nasdaq Stock Market, where our common stock was listed until 2017, requires that the majority of a company's directors be independent and that a company's nominating, audit and compensation committee be comprised entirely of independent directors. We are no longer required to comply with these independence standards because our common stock is no longer listed on the Nasdaq Stock Market. We would not meet these standards if they applied to use because a majority of our board of directors would not be considered to be independent under Nasdaq's standards and our audit and nominating and governance committees include directors who would not be considered independent under Nasdaq's independence standards. See "Management - Committees of the Board of Directors" and "—Independence of Board of Directors." Accordingly, you may not have the same protections afforded to shareholders of companies that have or that are required to have a board and committees that satisfy Nasdaq's independence standards.

***Security breaches and other disruptions could compromise our information and expose us to liability, which would cause our business and reputation to suffer.***

In the ordinary course of our business, we collect and store sensitive data, including intellectual property, our proprietary business information and that of our customers and business partners, some of which is stored on our network and some of which is stored with our third-party vendors. Despite our security measures, our information technology and infrastructure may be vulnerable to attacks by hackers or breached due to operator error, malfeasance or other disruptions. Any such breach could compromise our network and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in competitive hardship, legal claims or proceedings, liability under laws that protect the confidentiality of information, disrupt our operations, and damage our reputation, which could adversely affect our business.

***If we are deemed to infringe on the proprietary rights of third parties, we could incur unanticipated expense and be prevented from providing our products and services.***

We could be subject to intellectual property infringement claims as the number of our competitors grows and if our products or the functionality of our products overlap with patents of our competitors. While we do not believe that we have infringed or are infringing on any proprietary rights of third parties, we cannot assure you that infringement claims will not be asserted against us or that those claims will be unsuccessful. We could incur substantial costs and diversion of management resources defending any infringement claims whether or not such claims are ultimately successful. Furthermore, a party making a claim against us could secure a judgment awarding substantial damages, as well as injunctive or other equitable relief that could effectively block our ability to provide products or services. In addition, we cannot assure you that licenses for any intellectual property of third parties that might be required for our products or services will be available on commercially reasonable terms, or at all.

***Our business depends on our intellectual property rights, and if we are unable to protect them, our competitive position may suffer.***

Our business plan is predicated on our proprietary technology. Accordingly, protecting our intellectual property rights is critical to our continued success and our ability to maintain our competitive position. Our goal is to protect our proprietary rights through a combination of patent, trademark, trade secret and copyright law, confidentiality agreements and technical measures. We generally enter into non-disclosure agreements with our employees, consultants and suppliers and limit access to our trade secrets and technology. We cannot assure you that the steps we have taken will prevent misappropriation of our technology. Misappropriation of our intellectual property would have an adverse effect on our competitive position.

***If we lose the services of our Chief Executive Officer, Chief Financial Officer or other key personnel, we may be unable to replace them, and our business, financial condition and results of operations may be adversely affected.***

Our success largely depends on the continued skills, experience, efforts and policies of our management and other key personnel and our ability to continue to attract, motivate and retain highly qualified employees. In particular, the services of John Regazzi, our Chief Executive Officer, and Lutz Henckels, our Chief Financial Officer, are integral to the execution of our business strategy. We believe that the loss of the services of Mr. Regazzi or Dr. Henckels could adversely affect our business, financial condition and results of operations. We cannot assure you that Mr. Regazzi or Dr. Henckels or our other executive officers will continue to provide services to the Company. We do not maintain key man insurance for any of our key personnel.

***Our directors and executive officers and their affiliates beneficially own a significant number of shares of our common stock. Their interests may conflict with our outside shareholders, who may be unable to influence management and exercise control over our business.***

As of the date of this prospectus, our executive officers and directors beneficially own approximately 12% of our shares of common stock. As a result, our executive officers and directors may be able to: affect the election or defeat the election of our directors, amend or prevent amendment to our certificates of incorporation or bylaws, effect or prevent a merger, sale of assets or other corporate transaction, and control the outcome of any other matter submitted to the shareholders for vote. Accordingly, our outside shareholders may be unable to influence management and exercise control over our business.



***We do not intend to pay cash dividends to our shareholders, so you will not receive any return on your investment in our common stock prior to selling your shares.***

We have never paid any dividends to our common shareholders and do not foresee doing so. We currently intend to retain any future earnings for funding growth and, therefore, do not expect to pay any cash dividends in the foreseeable future. If we determine that we will pay cash dividends to the holders of our common stock, we cannot assure that such cash dividends will be paid on a regular basis. The success of your investment in the Company will likely depend entirely upon any future appreciation. As a result, you will not receive any return on your investment prior to selling your shares in our Company and, for the other reasons discussed in this “Risk Factors” section, you may not receive any return on your investment even when you sell your shares in our Company.

***We require additional capital to support our current operations and this capital has not been readily available.***

We will require additional debt or equity financing to fund our current operations. Our recent history of losses, changes to our product focus and the development of new products makes it difficult to evaluate our current business model and future prospects. Accordingly, investors should consider our prospects in light of the costs, uncertainties, delays and difficulties frequently encountered by companies developing new products as we have, in fact, encountered. Potential investors should carefully consider the risks and uncertainties that a company with limited funds and recently developed products, will face. In particular, potential investors should consider that there is a significant risk that we will not be able to:

- implement or execute our current business plan, which may or may not be sound;
- Successfully and timely sell, manufacture and ship our products;
- maintain our anticipated management; and
- raise sufficient funds in the capital markets to carry out our business plan.

If we raise additional funds through further issuances of equity or convertible debt securities, our existing shareholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our existing capital stock. Any debt financing secured by us in the future could involve restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities. In addition, we may not be able to obtain additional financing on terms favorable to us, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us, when we require it, our ability to continue to support our current operations and to respond to business challenges would be significantly limited. If we cannot access the capital necessary to support our business, we would be forced to curtail our business activities or even shut down operations. If we cannot execute any one of the foregoing or similar matters relating to our business, the business may fail, in which case you would lose the entire amount of your investment in the Company.

***If we fail to maintain an effective system of internal controls, we may not be able to report our financial results accurately or prevent fraud. Any inability to report and file our financial results accurately and timely could harm our reputation and adversely impact the trading price of our common stock.***

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. If we cannot provide reliable financial reports or prevent fraud, we may not be able to manage our business as effectively as we would if an effective control environment existed, and our business and reputation with investors may be harmed.

With each prospective acquisition, we will conduct whatever due diligence is necessary or prudent to assure us that the acquisition target can comply with the internal controls requirements of The Sarbanes-Oxley Act of 2002.

Notwithstanding our diligence, certain internal controls deficiencies may not be detected. As a result, any internal control deficiencies may adversely affect our financial condition, results of operations and access to capital. We have not performed an in-depth analysis to determine if historical undiscovered failures of internal controls exist, and may in the future discover areas of our internal controls that need improvement.

## Risks Related to Our Securities

*Our stock price may be volatile and you may not be able to resell your shares at or above the purchase price.*

The market price of our common stock is likely to be highly volatile and could fluctuate widely in price in response to various factors, many of which are beyond our control, including the following:

our ability to execute our business plan;

changes in our industry;

competitive pricing pressures;

our ability to obtain working capital financing;

additions or departures of key personnel;

increases in the number of shares of common stock outstanding as our preferred stock converts to common stock, or as warrants are exercised, or both;

sales of our common stock by us or our shareholders;

operating results that fall below expectations;

regulatory developments;

economic and other external factors;

period-to-period fluctuations in our financial results;

the public's response to press releases or other public announcements by us or third parties, including filings with the SEC;

changes in financial estimates or ratings by any securities analysts who follow our common stock, our failure to meet these estimates or failure of those analysts to initiate or maintain coverage of our common stock;

changes in expected national defense spending or budgets;

the development and sustainability of an active trading market for our common stock; and

any future sales of our common stock by our officers, directors and shareholders.

In addition, the securities markets have from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. Our stock at any time has historically traded on low volume on the OTCQB Market and, previously, on the NASDAQ Capital Market. Market and volume fluctuations may also materially and adversely affect the market price of our common stock.

*We are subject to penny stock regulations and restrictions and you may have difficulty selling shares of our common stock.*

Our common stock is subject to the provisions of Section 15(g) of the Exchange Act and Rule 15g-9 thereunder, commonly referred to as the “penny stock rule”. Section 15(g) sets forth certain requirements for transactions in penny stock, and Rule 15g-9(d) incorporates the definition of “penny stock” that is found in Rule 3a51-1 of the Exchange Act. The SEC generally defines a penny stock to be any equity security that has a market price less than \$5.00 per share, subject to certain exceptions. We are subject to the SEC’s penny stock rules.

Because our common stock is deemed to be penny stock, trading in the shares of our common stock is subject to additional sales practice requirements on broker dealers who sell penny stock to persons other than established customers and accredited investors. “Accredited investors” are generally persons with assets in excess of \$1,000,000 or annual income exceeding \$200,000 or \$300,000 together with their spouse. For transactions covered by these rules, broker dealers must make a special suitability determination for the purchase of securities and must have the purchaser’s written consent to the transaction prior to the purchase. Additionally, for any transaction involving a penny stock, unless exempt, the rules require the delivery, prior to the first transaction, of a risk disclosure document prepared by the SEC relating to the penny stock market. A broker dealer also must disclose the commissions payable to both the broker-dealer and the registered representative and current quotations for the securities. Finally, monthly statements must be sent disclosing recent price information for penny stocks held in an account and information to the limited market in penny stocks. Consequently, these rules may restrict the ability of broker-dealers to trade and/or maintain a market in our common stock and may affect the ability of our shareholders to sell their shares.

Consequently, these rules may restrict the ability or willingness of a broker-dealer to trade and/or maintain a market in our common stock and may affect the ability of our shareholders to sell their shares of common stock.

## **USE OF PROCEEDS**

We will not receive any of the proceeds from the sale of shares of common stock by the Selling Securityholders. However, we will receive proceeds from the exercise of the warrants if they are exercised for cash by the Selling Securityholders, and will use such proceeds for working capital purposes.

## **MARKET FOR REGISTRANT’S COMMON EQUITY AND RELATED SHAREHOLDER MATTERS**

### **Common Stock Market Prices**

Our common stock is traded on the OTCQB market under the symbol “GIGA”. The number of record holders of our common stock as September 28, 2018 was approximately 10,939,011. A significantly larger number of shareholders may be “street name” or beneficial holders, whose shares of record are held by banks, brokers and other financial institutions. The following table shows the high and low closing bid quotations for the common stock during the indicated fiscal periods. These quotations reflect inter-dealer prices without mark-ups, mark-downs, or commission and may not reflect actual transactions.

**Fiscal Quarter**

**High Low**

**2019 Fiscal Year**

	September 30, 2018 – December 29, 2018		
Third Quarter	(through October 15, 2018)	\$0.35	\$0.26
Second Quarter	July 1, 2018 – September 29, 2018	0.46	0.30
First Quarter	April 1, 2018 – June 30, 2018	0.35	0.23

**2018 Fiscal Year**

Fourth Quarter	December 31, 2017 – March 31, 2018	\$0.42	\$0.26
Third Quarter	October 1, 2017 – December 30, 2017	0.85	0.37
Second Quarter	June 25, 2017 – September 30, 2017	0.89	0.58
First Quarter	March 26, 2017 – June 24, 2017	0.90	0.73

**2017 Fiscal Year**

Fourth Quarter	December 25, 2016 – March 25, 2017	\$1.07	\$0.65
Third Quarter	September 25, 2016 – December 24, 2016	0.95	0.63
Second Quarter	June 26, 2016 – September 24, 2016	1.15	0.93
First Quarter	March 27, 2016 – June 25, 2016	1.47	1.06

**Dividend Policy**

We have not paid cash dividends on our common stock in the past and have no current plans to do so in the future, believing our available capital is best used to fund our operations, including product development and enhancements. In addition, in the absence of positive retained earnings, California law permits payment of cash dividends on our common stock only to the extent total assets exceed the sum of total liabilities and the liquidation preference amounts of preferred securities. At June 30, 2018, the Company's assets were less than this sum by \$4.2 million. Our Series E Shares provide for semi-annual 6% cash dividends based on the original purchase price of \$25.00 per share, however we expect that we will exercise our right to pay any such dividends in shares of our common stock instead of cash for the foreseeable future.

### ***Penny Stock***

Our common stock is subject to the provisions of Section 15(g) of the Exchange Act and Rule 15g-9 thereunder, commonly referred to as the “penny stock rule.” Section 15(g) sets forth certain requirements for transactions in penny stock, and Rule 15g-9(d) incorporates the definition of “penny stock” that is found in Rule 3a51-1 of the Exchange Act. The SEC generally defines a penny stock to be any equity security that has a market price less than \$5.00 per share, subject to certain exceptions. We are subject to the SEC’s penny stock rules. Because our common stock is deemed to be penny stock, trading in the shares of our common stock is subject to additional sales practice requirements on broker dealers who sell penny stock to persons other than established customers and accredited investors. “Accredited investors” are generally persons with assets in excess of \$1,000,000 or annual income exceeding \$200,000 or \$300,000 together with their spouse. For transactions covered by these rules, broker dealers must make a special suitability determination for the purchase of securities and must have the purchaser’s written consent to the transaction prior to the purchase. Additionally, for any transaction involving a penny stock, unless exempt, the rules require the delivery, prior to the first transaction, of a risk disclosure document prepared by the SEC relating to the penny stock market. A broker dealer also must disclose the commissions payable to both the broker-dealer and the registered representative and current quotations for the securities. Finally, monthly statements must be sent disclosing recent price information for penny stocks held in an account and information to the limited market in penny stocks. Consequently, these rules may restrict the ability of broker-dealers to trade and/or maintain a market in our common stock and may affect the ability of our shareholders to sell their shares.

## **MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*The following discussion and analysis should be read in conjunction with our audited (and unaudited) financial statements and the related notes that are incorporated by reference into this prospectus. All dollar amounts in this registration statement refer to U.S. dollars unless otherwise indicated.*

### **Overview and Refocusing of Giga-tronics**

We produce YIG (Yttrium, Iron, Garnet) tuned oscillators, RADAR filters, and microwave synthesizers for use in military defense applications. We also produce sophisticated functional test systems which are primarily used in RADAR/EW test applications. We have two reporting segments: Microsource and the Giga-tronics Division.

Microsource develops and manufactures YIG RADAR filters used in fighter jet aircraft, primarily for two prime contractors. These YIG RADAR filters are typically delivered pursuant to contracts covering multiple interim and or fiscal year periods and often include non-recurring engineering services for the design or redesign of these products

prior to quantity production orders and deliveries.

Our Giga-tronics Division designs, manufactures and markets a family of functional test products for the RADAR and electronic warfare, or RADAR/EW segment of the defense electronics market. Our RADAR/EW test products are used to evaluate the performance of RADAR and Electronic Warfare (EW) systems. Giga-tronics Division customers include major prime defense contractors, the armed services (primarily in the U.S.) and research institutes.

Our Giga-tronics Division's RADAR/EW test and simulation products have been our principal new product development initiative since 2011. Between 2013 and 2016, we sold the substantial majority of our original broad product line of general purpose parametric test products used for the design, production, repair and maintenance of aerospace and telecommunications equipment because of lack of growth potential and poor gross margins. We believe the RADAR/EW test product market possesses greater long-term opportunities for revenue growth and improved gross margins compared to the general purpose test equipment marketplace. We believe that customer spending for RADAR/EW systems, including our test and simulation products, will grow in future years due to the increasing complexity of RADAR signals and foreign investment in new technology which may increase customer demand for more sophisticated test solutions.



The sales of our legacy general-purpose test product lines allowed us to significantly reduce our headcount and operating expenses during fiscal years 2018 and 2017. For example, our operating expenses for fiscal 2018 were 15% lower as compared to fiscal year 2017 and 30% lower as compared to fiscal year 2016.

Although we believe our functional RADAR/EW test products have the potential to significantly grow our sales revenue, we have experienced significant delays in developing, manufacturing, and receiving orders for these products. These RADAR/EW test products are the most technically complex and advanced products that we have developed and manufactured, and we have experienced delays in efficiently manufacturing these products and bringing them to market. These products are priced significantly higher than our previous general-purpose test products, and we have experienced longer than anticipated procurement cycles in the RADAR/EW market we service. The delays in the development, refinement and manufacturing of the RADAR/EW platform products, along with the longer than anticipated procurement cycles, contributed to the significant operating losses in fiscal years 2018 and 2017. Through March 31, 2018, we delivered our new RADAR/EW test products to multiple customers resulting in approximately \$10 million in revenue. Additionally, we have recently restructured and refocused our sales force to focus on selling complete custom test solutions to defense agencies and prime contractors as opposed to selling test instruments.

We also anticipate growth in our Microsource RADAR filter business based on our order backlog as of June 30, 2018 and the potential for additional future orders for existing products and related services.

### **Significant Orders**

Both Microsource and the Giga-tronics Division generally receive a limited number of large customer orders each year. The timing of orders, and any associated milestones achievement, can cause significant differences in orders received, backlog, sales, deferred revenue, inventory and cash flow when comparing one fiscal period to another. Below is a review of recently received significant orders at March 31, 2018:

#### ***Microsource***

In fiscal 2015, Microsource received a \$6.5 million order for non-recurring engineering services and for delivery of a limited number of flight-qualified prototype hardware from a prime defense contractor to develop a variant of our high performance, fast tuning YIG RADAR filters for a fighter jet aircraft platform. In fiscal 2016 our Microsource business unit also finalized an associated multiyear \$10.0 million YIG production order. We began shipping the shipping the 2106 YIG production order in the second quarter of fiscal 2017 and anticipate shipping the remainder through fiscal 2020.

In the first quarter of fiscal 2017, Microsource received a \$4.5 million YIG RADAR filter we have been manufacturing for a fighter jet platform since fiscal 2014. We shipped approximately \$4.1 million of this order in fiscal 2017 and shipped the remainder in the first quarter of fiscal 2018.

In July 2016, Microsource received a \$1.9 million non-recurring engineering order associated with redesigning a component of its high performance YIG filter used on a fighter jet aircraft platform. Of this non-recurring engineering services service order, we delivered services of approximately \$884,000 and \$816,000 in fiscal years 2017 and 2018, respectively, and expect to deliver the remaining services during fiscal 2019.

In September 2017, Microsource received a \$4.8 million order for continuing the YIG RADAR filter for a fighter jet platform. The Company expects to begin initial shipments of these filters in the fourth quarter of fiscal 2018 and ship the bulk of the order over the succeeding 9 to 12 month period.

In February 2018, Microsource received a \$1.6 million YIG RADAR filter order from one of our customers. We expect to start shipping this order in the second quarter of fiscal 2019.

### ***Giga-tronics Division***

In June 2016, the Giga-tronics Division received a \$3.3 million order from the U.S. Navy for our Real-Time Threat Emulation System (TEmS) which is a combination of the ASGA hardware platform, along with software developed and licensed to us from a major aerospace and defense company. The complete order included ASGA blades, along with engineering services to integrate the Real-Time TEmS product with additional third-party hardware and software for the customer. We fulfilled the order during the fourth quarter of our 2017 fiscal year. In July 2016, we received an additional order for \$542,000 from the U.S. Navy for our ASG hardware only platform. We fulfilled this order in the second quarter of our 2017 fiscal year.

In July 2017, the Giga-tronics Division received a follow on \$1.7 million order from the U.S. Navy for our TEmS product. We fulfilled this order during the third quarter of fiscal 2018.

### **Critical Accounting Policies**

Our discussion and analysis of our financial condition and the results of operations are based upon our Audited Consolidated Financial Statements as of and for the Years Ended March 31, 2018 and March 25, 2017, which we refer to as our 2018 Audited Financial Statements, included in this prospectus and the data used to prepare them. The 2018 Audited Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States and management is required to make judgments, estimates and assumptions in the course of such preparation. The Summary of Significant Accounting Policies included with the 2018 Audited Financial Statements describes the significant accounting policies and methods used in the preparation of the consolidated financial statements. On an ongoing basis, we re-evaluate our judgments, estimates and assumptions. We base our judgment and estimates on historical experience, knowledge of current conditions, and our beliefs of what could occur in the future considering available information. Actual results may differ from these estimates under different assumptions or conditions. We have identified the following as our critical accounting policies:

#### *Revenue Recognition*

Revenues are recognized when there is evidence of an arrangement, delivery has occurred, the price is fixed or determinable, and collectability is reasonably assured. This generally occurs when products are shipped and the risk of loss has passed. Revenue related to products shipped subject to customers' evaluation is recognized upon final acceptance. Revenue recognized under the milestone method is recognized once milestones are met. Determining whether a milestone is substantive is a matter of judgment and that assessment is performed only at the inception of the arrangement. The consideration earned from the achievement of a milestone must meet all of the following for the milestone to be considered substantive:

- a. It is commensurate with either of the following:
  - 1. Our performance to achieve the milestone, or
  - 2. The enhancement of the value of the delivered item or items as a result of a specific outcome resulting from our performance to achieve the milestone.
- b. It relates solely to past performance.
- c. It is reasonable relative to all of the deliverables and payment terms (including other potential milestone consideration) within the arrangement.

Milestones for revenue recognition are agreed upon with the customer prior to the start of the contract and some milestones will be tied to product shipping while others will be tied to design review.

On certain contracts with one of our significant customers we receive payments in advance of manufacturing. Advanced payments are recorded as deferred revenue until the revenue recognition criteria described above have been met.

#### *Product Warranties*

Our warranty policy generally provides one to three years of coverage depending on the product. We record a liability for estimated warranty obligations at the date products are sold. The estimated cost of warranty coverage is based on our actual historical experience with our current products or similar products. For new products, the required reserve is based on historical experience of similar products until sufficient historical data has been collected on the new product. Adjustments are made as new information becomes available.

#### *Accounts Receivable and Allowance for Doubtful Accounts*

Accounts receivable are stated at their net realizable values. We have estimated an allowance for uncollectible accounts based on our analysis of specifically identified problem accounts, outstanding receivables, consideration of the age of those receivables, our historical collection experience, and adjustments for other factors management believes are necessary based on perceived credit risk.

### *Inventory*

Inventories are stated at the lower of cost or market. Cost is determined on a first-in, first-out basis. We periodically review inventory on hand to identify and write down excess and obsolete inventory based on estimated product demand.

### *Income Taxes*

Income taxes are accounted for using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Future tax benefits are subject to a valuation allowance when management is unable to conclude that its deferred tax assets will more likely than not be realized. The ultimate realization of deferred tax assets is dependent upon generation of future taxable income during the periods in which those temporary differences become deductible. Management considers both positive and negative evidence and tax planning strategies in making this assessment.

We consider all tax positions recognized in the consolidated financial statements for the likelihood of realization. When tax returns are filed, it is highly certain that some positions taken would be sustained upon examination by the taxing authorities, while others are subject to uncertainty about the merits of the positions taken or the amounts of the positions that would be ultimately sustained. The benefit of a tax position is recognized in the financial statements in the period during which, based on all available evidence, management believes it is more likely than not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50 percent likely of being realized upon settlement with the applicable taxing authority. The portion of the benefits associated with tax positions taken that exceeds the amount measured as described above, if any, would be reflected as unrecognized tax benefits, as applicable, along with any associated interest and penalties that would be payable to the taxing authorities upon examination. We also recognize accrued interest and penalties, if any, related to unrecognized tax benefits as a component of the provision for income taxes in the consolidated statements of operations.

### *Share Based Compensation*

We have stock incentive plans providing for the issuance of stock options and restricted stock to employees and directors. We calculate share based compensation expense for stock options using a Black-Scholes-Merton option pricing model and record the fair value of stock option and restricted stock awards expected to vest over the requisite service period. In so doing, we make certain key assumptions in making estimates used in the model. We believe the estimates used, which are presented in the Notes to our 2018 Audited Financial Statements, are appropriate and reasonable.

*Going Concern*

We evaluate our relevant conditions and events that are known and reasonably knowable at the date that our financial statements are issued. This includes management's preparation and review of a forecasting process that evaluates a twelve-month horizon period post issuance of the consolidated financial statements. Management responds to the known and reasonably knowable circumstances that give rise to our initial doubt as a going concern by implementing plans that are reasonably sufficient to overcome the conditions that give rise to our ability to continue. Our 2018 Audited Financial Statements have been prepared assuming we will continue as a going concern and do not include any adjustments that might result if we were unable to do so.

*Software Development Costs*

We expense development costs included in the research and development of new products and enhancements to existing products as incurred, until technological feasibility in the form of a working model has been established. Development costs of computer software to be sold, leased, or otherwise marketed are subject to capitalization beginning when our product's technological feasibility has been established and ending when the product is available for general release to our customers.

*Discontinued Operations*

We review reporting and presentation requirements for discontinued operations in accordance with the guidance provided by ASC 205-20 as we move to newer technology within the test market from legacy products to the newly developed Advanced Signal Generator. The disposal of these product line sales represent an evolution of the Company's Giga-tronics Division to a more sophisticated product offered to the same customer base. The Company has evaluated the sales of product lines concluding that each product line does not meet the definition of a "component of an entity" as defined by ASC 205-20. We are able to distinguish revenue and gross margin information as disclosed in the Notes to our 2018 Audited Financial Statements, Sale of Product Lines; however, operations and cash flow information is not clearly distinguishable and the Company is unable to present meaningful information about results of operations and cash flows from those product lines.

**Off-Balance-Sheet Arrangements**

We have no off-balance-sheet arrangements (including standby letters of credit, guaranties, contingent interests in transferred assets, contingent obligations indexed to its own stock or any obligation arising out of a variable interest in an unconsolidated entity that provides credit or other support to the Company), that have or are likely to have a material effect on its financial conditions, changes in financial conditions, revenue, expense, results of operations, liquidity, capital expenditures or capital resources.

**Results of Operations – Discussion of Results of Operations for the Fiscal Years Ended March 31, 2018 and March 25, 2017**

New orders by reporting segment are as follows for the fiscal years ended:

<b>New Orders</b>			<b>% Change</b>		
	<b>2018</b>	<b>2017</b>	<b>2018</b>	<b>2017</b>	
			<b>vs.</b>	<b>vs.</b>	
<b>(Dollars in thousands)</b>	<b>2017</b>	<b>2016</b>	<b>2017</b>	<b>2016</b>	
ASGA (fka "Hydra")	\$1,813	\$4,803	\$2,506	(62 )%	92 %
Legacy Product	238	2,724	7,182	(91 )%	(62 )%
Giga-tronics Division	\$2,051	\$7,527	\$9,688	(73 )%	(22 )%
Microsource	7,550	7,567	13,739	(0.2)%	(45 )%
Total	\$9,601	\$15,094	\$23,427	(36 )%	(36 )%

Total new orders received in fiscal 2018 were \$9.6 million which was \$5.5 million or 36% lower than the \$15.1 million received in fiscal 2017. The decrease was primarily the result of lower Giga-tronics Division product orders (\$5.5 million or 73%) due mainly to our recent divestures of legacy test product lines and a decrease in ASGA product orders of \$3.0 million due to a longer than anticipated sales cycle.

New orders received in fiscal 2017 decreased by \$8.3 million or 36% from fiscal 2016. The Giga-tronics Division orders decreased by \$2.2 million or 22% primarily due to the decreased orders for the legacy and switch products which the Company no longer manufactures. Our Microsource business unit saw a \$6.2 million or 45% decrease in fiscal 2017 primarily due to the impact of a large, multi-year \$10.0 million YIG initial production order (in which scheduled product deliveries are through 2020) and a \$3.0 million ongoing production order, both received in fiscal 2016, compared to a smaller \$4.5 million order for YIG RADAR filters (in which scheduled deliveries covered a shorter period) and a related \$1.9 million order for non-recurring engineering services received in fiscal 2017.



The following table shows order backlog and related information at fiscal year-end for the indicated years:

<b>Backlog</b>				<b>% change</b>	
	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2018</b>	<b>2017</b>
(Dollars in thousands)				<b>vs.</b>	<b>vs.</b>
				<b>2017</b>	<b>2016</b>
ASGA (fka "Hydra")	\$20	\$562	\$1,003	(96 )%	(44 )%
Legacy Products	57	201	2,277	(72 )%	(91 )%
Giga-tronics Division	77	763	3,280	(90 )%	(77 )%
Microsource	11,088	10,601	11,280	4.6 %	(6 )%
Backlog of unfilled orders	\$11,165	\$11,364	\$14,560	(1.8)%	(22 )%
ASGA (fka "Hydra")	20	562	1,003	(96 )%	(44 )%
Legacy Products	57	201	2,277	(72 )%	(91 )%
Giga-tronics Division	77	763	3,280	(90 )%	(77 )%
Microsource	7,342	4,917	2,704	49 %	82 %
Backlog of unfilled orders shippable within one year	\$7,419	\$5,680	\$5,984	31 %	(5 )%
ASGA (fka "Hydra")	—	—	—	•	—
Legacy Products	—	—	—	—	—
Giga-tronics Division	—	—	—		
Microsource	3,746	5,684	8,576	(34 )%	(34 )%
Backlog of unfilled orders shippable after one year	\$3,746	\$5,684	\$8,576	(34 )%	(34 )%

Backlog at the end of fiscal 2018 decreased by \$199,000 or 1.8% compared to the end of fiscal 2017. The decrease in backlog was primarily due to a longer than anticipated sales cycle for ASGA products for the Giga-tronics Division offset by an increase in YIG RADAR filter products for Microsource.

Backlog at the end of fiscal 2017 decreased \$3.2 million or 22% compared to the end of fiscal 2016. The decrease in backlog was primarily due to the completion of the non-recurring engineering services order for the Microsource reporting segment as well as the fulfillment of ASGA orders for the Giga-tronics Division. Backlog also decreased due to the fulfillment of the legacy and switch product lines as the Company sold these products lines in fiscal 2017.

The allocation of net sales by reporting segment was as follows for the fiscal years shown:

<b>Allocation of Net Sales</b>				<b>% change</b>	
	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2018</b>	<b>2017</b>
(Dollars in thousands)				<b>vs.</b>	<b>vs.</b>

				<b>2017</b>	<b>2016</b>
ASGA (“Hydra”) Sales	\$2,205	\$5,286	\$1,783	(58)%	197 %
Legacy Product Sale	532	2,735	6,896	(81)%	(60 )%
Giga-tronics Division	\$2,737	\$8,021	\$8,679	(66)%	(8 )%
Microsource	7,063	8,246	5,917	(14)%	39 %
Total	\$9,800	\$16,267	\$14,596	(40)%	11 %

Net sales for the fiscal year ended March 31, 2018 were \$9.8 million, a decrease of 40%, compared to \$16.3 million for the fiscal year ended March 25, 2017. The majority of the sales decrease in fiscal 2018 was attributable to the Giga-tronics Division which was lower by \$5.3 million or 66% primarily due to a \$3.1 million or 58% decrease in ASGA product sales due to longer than anticipated sales cycles and in part, by the Company’s reduced focus on selling complete RADAR/EW test solutions in fiscal 2018, and a \$2.2 million or 81% decrease in legacy product sales due to the Company’s recent legacy product line divestitures. Microsource sales decreased in fiscal 2018 by \$1.2 million or 14% compared to fiscal 2017 due to lower scheduled YIG RADAR filter shipments in fiscal 2018 and the completion of certain related nonrecurring engineering (NRE) services in fiscal 2017.

Net sales for fiscal 2017 were \$16.3 million, an increase of \$1.7 million or 11% compared to \$14.6 million in fiscal 2016. The majority of the sales increase in fiscal 2017 was attributable to Microsource due to an increase in scheduled YIG RADAR filter shipments in fiscal 2017 and the completion of certain related non-recurring engineering services in fiscal 2017. Giga-tronics Division sales decreased \$658,000 or 8% in fiscal 2017 compared to fiscal 2016 which was comprised of a \$4.2 million or 60% decrease in legacy product sales due to recent product line divestitures which was substantially offset by a \$3.5 million increase in ASGA system shipments due mainly to the orders from the US Navy in fiscal 2017.

The allocation of gross margin by reporting segment was as follows for the fiscal years shown:

<b>Gross Margin</b>	% change				
	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>vs.</b>	<b>2017</b>
(Dollars in thousands)	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>vs.</b>	<b>vs.</b>
				<b>2017</b>	<b>2016</b>
Giga-tronics Division	\$(12 )	\$1,512	\$2,360	(101)%	(36 )%
Microsource	2,748	3,039	2,261	(10 )%	34 %
Total	\$2,736	\$4,551	\$4,621	(40 )%	(2 )%

Overall gross margin decreased in fiscal 2018 to \$2.7 million from \$4.6 million for fiscal 2017. Gross margin in fiscal 2018 was negatively impacted by the higher cost of ASGA product line sales in fiscal 2018 compared to fiscal 2017 due to the costs related to rework, and refinement of features, the adverse impact of fixed manufacturing overhead upon lower production volume in fiscal 2018 and the increase in non-cash charges associated with the impact of a change in estimate of capitalized software development costs and amortizing the remaining cost thereof during fiscal 2018.

Overall gross margin for fiscal 2017 remained relatively flat with fiscal 2016. The Giga-tronics Division gross margin was negatively impacted by inventory parts which were transferred to purchasers of legacy business lines at cost, non-cash charges totaling approximately \$477,000 associated with the amortization of capitalized software costs as we began started shipping our ASG TEmS units in fiscal 2017 and unabsorbed factory overhead variances. The increase in Microsource gross margin was primarily due to the increased deliveries of YIG RADAR filters during fiscal 2017 compared fiscal 2016.

Operating expenses were as follows for the fiscal years shown:

<b>Operating Expenses</b>	% change				
	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>vs.</b>	<b>2017</b>
(Dollars in thousands)				<b>vs.</b>	<b>vs.</b>
	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>vs.</b>	<b>2017</b>
Engineering	\$1,794	\$2,254	\$2,806	(20)%	(20 )%
Selling, general and administrative	4,076	4,641	5,522	(12)%	(16 )%
Total	\$5,870	\$6,895	\$8,328	(15)%	(17 )%

Operating expenses decreased 15% or \$1.0 million in fiscal 2018 compared to fiscal 2017. Engineering expenses decreased \$460,000 during fiscal 2018 when compared to fiscal 2017 primarily due to a decrease in personnel related expenses due to lower headcount. Engineering expenses were also lower in fiscal 2018 due to certain engineers having been assigned to a Microsource nonrecurring engineering project that is recorded as cost of sales. Selling, general and administrative expenses decreased 12% or \$565,000 primarily due to a decrease in headcount and personnel related expenses, a decrease in outside services related to management consulting, a decrease in bonuses and commissions as a result of the sale of the legacy products to Astronics and Spanawave, and lower lease and facilities costs as a result of the Company's relocation to a smaller facility in Dublin, California during May 2017.

Operating expenses decreased 17%, or \$1.4 million in fiscal 2017 compared to fiscal 2016. Engineering expenses decreased due to lower personnel related expenses as a result of the sale of our switch and other legacy product lines. Engineering expenses were also lower in fiscal 2017 due to certain engineers having been assigned to a Microsource nonrecurring engineering project that is recorded as cost of sales. Selling, general and administrative expenses decreased primarily due to a decrease associated with non-cash stock based compensation (primarily in connection with director compensation), a decrease in outside services related to management consulting, and a decrease in bonuses and commissions as a result of the sale of the legacy products to Astronics and Spanawave.

## **Derivative Liability**

On March 26, 2018, we entered into a modification agreement restructuring of certain terms associated our term loan of \$1.5 million from Partners For Growth (“PFG”) made on April 28, 2017, which also included modifying certain terms of outstanding warrants issued in connection with a previous loan made by PFG in 2014. As part of this loan modification, we agreed to eliminate a \$217,000 cash “put” provision in the warrants in exchange for issuing 150,000 shares of our common stock. Prior to the amendment to remove the put provision, the warrants were liability classified, and with market-to-market adjustments through earnings for each reporting period. We estimated the warrants’ fair value at \$155,000, prior to the loan modification. The modification of the warrants, to eliminate the put provision, resulted in a reclassification of the warrant from liability to equity. The warrants’ value using the Black-Scholes option-pricing model resulted in a revaluation of the warrants of zero value on March 26, 2018. The change in fair value of \$155,000 was recorded as a gain related to revaluation of the derivative liability (see Note 8 to our 2018 Audited Financial Statements, Term Loan, Revolving Line of Credit and Warrants).

In fiscal 2017, we recorded a gain of \$131,000 related to revaluation of the derivative liability associated with the PFG warrants issued in 2014.

## **Gain on Sale of Product Line**

In October 2017, we recognized a gain of \$324,000 net of \$51,000 of associated expenses related to the sale of legacy products. We received \$375,000 from the purchaser during the first quarter of fiscal 2017 but could not recognize the gain on the sale as a result of a dispute with the purchaser. On October 16, 2017, we reached a settlement agreement with the purchaser and the net gain from the asset sale is presented in our 2018 Audited Financial Statements.

In fiscal 2017, we recognized a net gain of \$802,000 associated with the sale of our Switch product line. (See Note 10 to our 2018 Audited Financial Statements, Sale of Product Lines.)

## **Net Interest Expense**

Net interest expense in fiscal 2018 was \$461,000, an increase of \$328,000 over fiscal 2017. The increased net interest expense in fiscal 2018 was primarily due to the additional interest as a result of non-compliance with certain covenants on the PFG loan and higher loan balances in fiscal 2018.

Net interest expense in fiscal 2017 was \$133,000 a decrease of \$250,000 over fiscal 2016. The decreased net interest expense in fiscal 2017 was primarily due to the lower principal balances on the PFG loan during fiscal 2017.

## Net Loss

Net loss was \$3.1 million in fiscal 2018, compared to a net loss of \$1.5 million in fiscal 2017. The higher net loss recorded in fiscal 2018 was primarily due to decreased revenues as well as increases in cost of sales due to the impact of the change in estimate related to capitalized software development costs and interest expense discussed above.

Net loss was \$1.5 million in fiscal 2017, compared to a net loss of \$4.1 million in fiscal 2016. The lower net loss recorded in fiscal 2017 was primarily due to increased revenues as well as lower operating expenses discussed above. Net loss was also lower due to the \$802,000 gain recorded associated with the sale of the Switch product line in the first quarter of fiscal 2017 as discussed above.

## Net Inventories

Inventories consisted of the following:

Net Inventories				% change	
	March 31, 2018	March 25, 2017	March 26, 2016	2018 vs. 2017	2017 vs. 2016
(Dollars in thousands)					
Raw materials	\$2,290	\$1,775	\$3,489	29%	(49)%
Work-in-progress	2,100	2,155	2,156	(3)%	—
Finished goods	561	473	2	19%	2355%
Demonstration inventory	536	408	47	31%	768%
Total	\$5,487	\$4,811	\$5,694	14%	(16)%

Net inventories increased by \$676,000 in March 25, 2018 from March 25, 2017. The increase was primarily the result of higher raw materials inventory due to the timing of YIG filter production, and increased demonstration inventory to support ASGA sales efforts.



**Financial Condition and Liquidity:** (Dollars in thousands)

	<b>Fiscal Year</b>	
	<b>Ended</b>	
	<b>March</b>	<b>March</b>
	<b>31,</b>	<b>25,</b>
	<b>2018</b>	<b>2017</b>
Cash and cash equivalents	\$1,485	\$1,421
Total current assets	7,423	7,638
Total current liabilities	7,809	7,018
Working capital	\$(386 )	\$620
Current ratio	0.95	1.09

As of March 31, 2018, Giga-tronics had \$1.5 million in cash and cash equivalents, compared to \$1.4 million as of March 25, 2017. The Company had negative working capital of (\$386,000) at March 31, 2018 compared to positive working capital of \$620,000 at March 25, 2017. The current ratio (current assets divided by current liabilities) at March 31, 2018 was 0.95 compared to 1.09 at March 25, 2017. The decrease in working capital was primarily due to the declining revenues and increased net loss during fiscal 2018.

**Cash Flows**

The following summary of our cash flows for the periods indicated has been derived from our consolidated financial statements included elsewhere in this filing:

	<b>Fiscal Year</b>	
	<b>Ended</b>	
	<b>March</b>	<b>March</b>
	<b>31,</b>	<b>25,</b>
	<b>2018</b>	<b>2017</b>
Net cash (used in) provided by operating activities	\$(1,617)	\$(56 )
Net cash (used in) provided by investing activities	(688 )	809
Net cash provided by (used in) financing activities	\$2,369	\$(663 )

**Cash Flows from Operating Activities**



We experienced negative cash flows from operating activities for fiscal years 2018 and 2017 due primarily to operating results.

Cash used by operating activities during the fiscal year ended March 31, 2018 of \$1.6 million was primarily attributable to our net loss of \$3.1 million and a gain on the sale of a product line of \$324,000, offset by non-cash charges of \$1.1 million for depreciation and amortization, \$251,000 for share-based compensation and a \$487,000 increase in deferred rent. Cash flow from our operating assets and liabilities decreased by \$83,000 primarily as a result of increased inventories of \$676,000, a decrease in accrued payroll and benefits and deferred revenue of \$240,000 each, and a \$111,000 decrease in accounts payable and other accrued liabilities, offset by a \$590,000 decrease in accounts receivable, a \$365,000 decrease in prepaid expenses and other current assets and a \$229,000 increase in other current liabilities.

Cash used by operating activities during the fiscal year ended March 25, 2017 of \$56,000 was primarily attributable to our net loss of \$1.5 million, a decrease of \$334,000 in capitalized software development costs, a gain on the sale of a product line of \$802,000, and a decrease in accounts payable of \$817,000, offset by an increase in accounts receivable of \$1.2 million, a decrease in inventories of \$883,000, an increase in deferred revenue of \$810,000 due to advance payment arrangements for raw materials with customers and non-cash charges of \$827,000 for depreciation and amortization and \$286,000 for stock-based compensation.

We expect that cash flows from operating activities will fluctuate in future periods due to a number of factors including our operating results, amounts of non-cash charges, and the timing of our billings, collections and disbursements.

### **Cash Flows from Investing Activities**

Cash used in investing activities for the fiscal year ended March 31, 2018 was \$688,000 as a result of leasehold improvements in connection with our facility relocation to Dublin, California.

Cash provided by investing activities for the fiscal year ended March 25, 2017 was \$809,000 as a result of a \$850,000 cash payment from Astronics related to the sale of our Switch product line, as well as a cash payment from Spanawave of \$375,000 received during the first quarter of fiscal 2017 related to the sale of our legacy product lines, partially offset by \$41,000 of capital equipment expenditures.

### **Cash Flows from Financing Activities**

Cash provided by financing activities for the fiscal year ended March 31, 2018 was \$2.4 million, primarily due to net proceeds of \$1.5 million from a new term loan with PFG and net proceeds of \$1.0 million from our sale of Series E Shares.

Cash used in financing activities for the fiscal year ended March 25, 2017 was \$663,000, primarily due to the repayment of our prior term loan with PFG and a portion of our line of credit with Bridge Bank.

### **Liquidity and Capital Resources**

We incurred a net loss of \$3.1 million and \$1.5 million in fiscal years 2018 and 2017, respectively. These losses have contributed to an accumulated deficit of \$28.7 million as of March 31, 2018. We have experienced delays in the development or refinement of features, receipt of orders, and shipments for the new RADAR/EW test system products. These delays have contributed, in part, to the losses and decreases in working capital.

Our new RADAR/EW test system products have shipped to several customers, but potential delays in the development of features, longer than anticipated sales cycles, or uncertainty as to our ability to efficiently manufacture these RADAR/EW test system products, could significantly contribute to additional future losses and decreases in working capital.

To help fund operations, we rely on advances under the line of credit with Bridge Bank. The line of credit which expired on May 7, 2017, was renewed through May 6, 2019. The credit agreement includes a subjective acceleration clause, which allows for amounts due under the facility to become immediately due in the event of a material adverse change in our business condition (financial or otherwise), operations, properties or prospects, or ability to repay the credit based on the lender's judgement. As of March 31, 2018, outstanding borrowings and available borrowing capacity under the line of credit were \$552,000 and \$77,000, respectively.

During April 2017, we entered into a \$1.5 million loan agreement with PFG to provide additional cash to fund our operations. As a result of experiencing continued delays in receiving RADAR/EW test system product orders in fiscal 2018, we were unable to maintain compliance with certain financial covenants required by the PFG loan and, as a result, were subject to a default interest rate between June 2017 and March 2018. On March 26, 2018, and concurrent with the execution of certain stock purchase agreements for the sale of new Series E Shares and conditional upon the sale of at least \$1.0 million in gross proceeds thereof, we entered into a modification agreement with PFG which provided for the restructuring of certain terms of the PFG loan including resetting of the financial covenants for the remaining loan term (See Note 8 to our 2018 Audited Financial Statements, Term Loans, Revolving Line of Credit and Warrants).

In order to raise additional working capital and to restructure the PFG loan, on March 26, 2018, we entered into a Securities Purchase Agreement for the sale of 43,800 shares of a newly designated series of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock, or Series E Shares, to approximately 15 private investors. The purchase price for each Series E Share was \$25.00. Gross proceeds received by the Company were approximately \$1.095 million. Net proceeds to the Company after fees and were approximately \$1.04 million. Each Series E Share is initially convertible at the option of the holder at the purchase price of \$0.25 per share of common stock, which is 100 shares of the Company's common stock per each Series E Share.

Additionally, to assist with the upfront purchases of inventory required for future product deliveries, we entered into advance payment arrangements with certain customers, whereby the customers reimburse the us for raw material purchases prior to the shipment of the finished products. We will continue to seek similar terms in future agreements with these customers and other customers.

Management will continue to review all aspects of its business including, but not limited to, the contribution of its individual business segments in an effort to improve cash flow and reduce costs and expenses, while continuing to invest, to the extent possible, in new product development for future revenue streams. Management will also continue seeking additional working capital and liquidity through debt (including debt refinancing), or equity financings, product line sales or potential cessation of unprofitable business product lines. However, there are no assurances that such financings or product line sales will be available at all, or on terms acceptable to us.

Our historical operating results and forecasting uncertainties indicate that substantial doubt exists related to our ability to continue. However, management believes that through the actions to date and possible future actions described above, we should have the necessary liquidity to continue operations at least twelve months from the issuance of the financial statements. However, we cannot predict, with certainty, the outcome of our actions to maintain or generate additional liquidity, including the availability of additional financing, or whether such actions would generate the expected liquidity as currently planned. Forecasting uncertainties also exist with respect to our RADAR/EW test system product line due to the potential longer than anticipated sales cycles, as well as with potential delays in the refinement of certain features, and/or our ability to efficiently manufacture it in a timely manner.

Therefore, the 2018 Audited Financial Statements have been prepared assuming that the Company will continue as a going concern; however, the above conditions raise substantial doubt about the Company's ability to do so. The 2018 Audited Financial Statements do not include any adjustments that might result if we were unable to do so.

### **Contractual Obligations**

We lease our Dublin, California facility under an operating lease agreement which expires in March 2023. We also lease certain equipment under operating leases. Total future minimum lease payments under these leases amount to approximately \$2.5 million, of which \$436,000 is scheduled to be paid in fiscal 2019.

We lease equipment under capital leases that expire through September 2020. The future minimum lease payments under these leases are approximately \$133,000.

We are committed to purchase certain inventory under non-cancelable purchase orders. As of March 31, 2018, total non-cancelable purchase orders were approximately \$1,260,000 and are scheduled to be delivered to the Company at various dates through March 2019.

**Results of Operations – Discussion of Results of Operations for the Quarters Ended June 30, 2018 and June 24, 2017.**

New orders received by segment are as follows:

**NEW ORDERS**

(Dollars in thousands)	Three Month Periods Ended			% change
	June 30, 2018	June 24, 2017		
Giga-tronics Division	\$52	\$ —	100	%
Microsource	413	17	NM	
Total	\$465	\$ 17	NM	

New orders received in the first quarter of fiscal 2019 increased to \$465,000 from \$17,000 received in the first quarter of fiscal 2018. Both the Giga-tronics Division and Microsource segment saw increases in orders in the first quarter of fiscal 2019. The Giga-tronics Division had minimal ASG orders in the first quarter of fiscal 2019. The increase in Microsource business unit orders during the first quarter of fiscal 2019 was attributable to YIG filters orders. The timing of receipt of expected large YIG filter contracts varies from period to period.

The following table shows order backlog and related information at the end of the respective periods:

## BACKLOG

(Dollars in thousands)	June	June	% change
	30, 2018	24, 2017	
Backlog of unfilled orders at end of period:			
Giga-tronics Division	\$—	\$444	(100 )%
Microsource	5,824	8,924	(35 )%
Total	\$5,824	\$9,368	(38 )%
Backlog of unfilled orders shippable within one year:			
Giga-tronics Division	\$—	\$444	(100 )%
Microsource	3,504	4,058	(14 )%
Total	\$3,504	\$4502	(22 )%

Backlog at the end of the first quarter of fiscal 2019 decreased 38% comparable prior year date primarily due to the impact of the adoption of ASC 606 on April 1, 2018. The Giga-tronics ASG backlog at June 30, 2018 was zero, a decrease of \$444,000 from the comparable prior year date due to the fulfilment of the Navy ASG order. Microsource saw a 35% decrease in backlog in the first quarter of fiscal 2019 which was primarily due the impact of the adoption of ASC 606.

The allocation of net sales was as follows for the periods shown:

## ALLOCATION OF NET SALES

(Dollars in thousands)	Three Month Periods Ended		% Change
	June 30, 2018	June 24, 2017	
Giga-tronics Division	\$129	\$297	(57 )%

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Microsource	2,921	1,694	72	%
Total	\$3,050	\$1,991	53	%

Fiscal 2019 first quarter net sales were \$3.1 million, a 53% increase as compared to \$2.0 million for the first quarter of fiscal 2018. Revenue allocated to our Microsource division increased 72% in part due to our required adoption of ASC 606 on April 1, 2018, the beginning of our 2019 fiscal year, using the modified retrospective method. Under ASC 606, revenue is recognized as the customer obtains control of the goods and services promised in the contract. Given the nature of our products and terms and conditions in our customer contracts, the customer typically obtains control as we perform work under such contract. Therefore, we expect to recognize revenue over time for substantially all of our contracts using the percentage-of-completion cost-to-cost method. As a result, we are recognizing revenue for these contracts as we incur costs, as opposed to when units are delivered. This change has resulted in earlier revenue recognition in the performance period as compared to the legacy method for those contracts. In addition, increased Microsource RADAR filter sales contributed to our higher revenue for the first quarter fiscal 2019 over 2018.

Net sales for our Giga-tronics Division were \$129,000, a 57% decrease from \$297,000 in the first quarter of fiscal 2018. The decrease was due to lower ASG product shipments. Sales for our Advanced Signal Generator, or ASG were \$100,000 in the first quarter of fiscal 2019 compared to \$200,000 in the first quarter of fiscal 2018.

Gross profit was as follows for the periods shown:

## GROSS PROFIT

(Dollars in thousands)	Three Month Periods Ended			% change
	June 30, 2018	June 24, 2017		
Total	\$1,306	\$466	180	%

Gross profit increased in the first quarter of fiscal 2019 to \$1,306,000 from \$466,000 for the first quarter of fiscal 2018. The higher gross profit was due to an increase in the sales of Microsource RADAR filters of 72% with only a 49% increase in Microsource cost of sales in the first quarter of fiscal 2019 over fiscal 2018. In addition, the increase in gross profit was partially due to the acceleration of revenue and related profit resulting from our adoption of ASC 606 as described above.

Operating expenses were as follows for the periods shown:

## OPERATING EXPENSES

(Dollars in thousands)	Three Month Periods Ended			% change
	June 30, 2018	June 24, 2017		
Engineering	\$375	\$452	(17)	%
Selling, general and administrative	1,001	1,171	(15)	%
Total	\$1,376	\$1,623	(15)	%

Operating expenses decreased 15% or \$247,000 in the first quarter of fiscal 2019 over fiscal 2018. Engineering expenses decreased \$77,000, primarily due to a decrease in personnel related expenses due to lower headcount. Selling, general and administrative decreased by \$170,000 primarily due to a decrease in headcount and personnel



related expenses, a decrease in bonuses and commissions, and lower lease and facilities cost as a result of the Company's relocation to a smaller facility in Dublin, California during May 2017.

### Interest Expense

Net interest expense in the first quarter of fiscal 2019 was \$177,000, an increase of \$75,000 over the first quarter of fiscal 2018. Interest expense increased primarily due to the loan modification with PFG effective March 26, 2018, as well as additional interest accrued as a result of our sale of Series E Shares. For the first quarter of fiscal 2019, interest expense includes \$50,000 of accretion of discounts on the new PFG loan compared to \$22,000 recorded in the first quarter of fiscal 2018.

### Net Loss

Net loss for the first quarter of fiscal 2019 was \$287,000 compared to a net loss of \$1.3 million recorded in the first quarter of fiscal 2018. The decrease in net loss was primarily due to the impact of the adoption of ASC 606 as described above.

### Financial Condition and Liquidity: (Dollars in thousands)

	<b>Periods Ended</b>	
	<b>June</b>	<b>March</b>
	<b>30,</b>	<b>31,</b>
	<b>2018</b>	<b>2018</b>
Cash and cash equivalents	\$748	\$1,485
Total current assets	5,436	7,423
Total current liabilities	4,613	7,809
Working capital	\$823	\$(386 )
Current ratio	1.18	0.95

As of June 30, 2018, Giga-tronics had \$748,000 in cash and cash equivalents, compared to \$1.5 million as of March 31, 2018. The Company had working capital of \$823,000 at June 30, 2018 compared to negative working capital of (\$386,000) at March 31, 2018. The current ratio (current assets divided by current liabilities) at June 30, 2018 was 1.18 compared to 0.95 at March 31, 2018. The increase in working capital was primarily due to the acceleration of revenue of \$596,000, an increase in prepaids and other current assets of \$643,000, a decrease in inventories of \$2.0 million, a decrease in deferred revenue of \$2.7 million all of which resulted from the adoption of ASC 606 during the first quarter of fiscal 2019.

## Cash Flows

The following summary of our cash flows for the periods indicated has been derived from our consolidated financial statements included elsewhere in this filing:

	<b>Three Months Ended</b>	
	<b>June 30, 2018</b>	<b>June 24, 2017</b>
Net cash used in operating activities	\$(945)	\$(1,107)
Net cash used in investing activities	\$—	\$(620 )
Net cash provided by financing activities	\$208	\$1,443

## Cash Flows from Operating Activities

Cash used by operating activities during the three months ended June 30, 2018 of \$945,000 was primarily attributable to our net loss, changes in our working capital accounts, offset by other non-cash charges of \$73,000 for depreciation and amortization and \$57,000 for share-based compensation. Cash flow from our operating assets and liabilities decreased by \$849,000 as a result of increased inventories of \$468,000, a \$70,000 increase in accrued payroll and benefits, and a \$12,000 increase in other accrued liabilities, offset by a \$550,000 decrease in deferred revenue, a \$516,000 decrease in prepaid expenses and other current assets, a \$94,000 decrease in accounts receivable, and a decrease in accounts payable of \$240,000.

Cash used in operating activities was \$1.1 million for the three-month period ended June 24, 2017. Cash used in operating activities in the first quarter of fiscal 2018 resulted primarily from our net loss of \$1.3 million, a decrease of \$441,000 in accounts payable, a decrease of \$206,000 in accounts receivable and a decrease of \$167,000 in deferred revenues. These were partially offset by non-cash charges of \$247,000 for depreciation and amortization and an increase of \$451,000 in deferred rent.

We expect that cash flows from operating activities will fluctuate in future periods due to a number of factors including our operating results, amounts of non-cash charges, and the timing of our billings, collections and disbursements.

### **Cash Flows from Investing Activities**

Cash used in investing activities for the three-month period ended June 30, 2018 was zero.

Cash used in investing activities for the three-month period ended June 24, 2017 was \$620,000 which was primarily attributable to leasehold improvements in connection with the Company's facility relocation to Dublin, California.

### **Cash Flows from Financing Activities**

Cash provided by financing activities for the quarter ended June 30, 2018 was \$208,000, primarily due to net proceeds of \$205,000 from the Company's issuance of Series E convertible preferred stock.

Cash provided by financing activities for the quarter ended June 24, 2017 was \$1.4 million, primarily due to proceeds from the Company's term loan with PFG which was funded on April 28, 2017.

## **BUSINESS**

### **Overview**

We manufacture specialized electronics equipment for use in military defense applications. Our operations consist of two business segments, those of our subsidiary, Microsource Inc., and those of our Giga-tronics Division.

Microsource primarily develops YIG (Yttrium, Iron, Garnet) tuned oscillators, filters, and microwave synthesizers for use in military defense applications. Microsource's two largest customers are prime contractors for which we develop and manufactures YIG RADAR filters used in fighter jet aircraft. Revenues from Microsource comprised a majority of our revenues for the fiscal years ended March 31, 2018 and March 25, 2017.

Our Giga-tronics Division designs, manufactures and markets a family of functional test products for the RADAR and electronic warfare, or RADAR/EW segment of the defense electronics market. Our RADAR/EW test products are used to evaluate the performance of RADAR/EW systems. Giga-tronics Division customers include major prime defense contractors, the armed services (primarily in the U.S.) and research institutes.

This product platform for RADAR/EW test applications, which we formerly referred to as "Hydra", has been our principal new product development initiative since 2011 within our test business, replacing our broad product line of general purpose parametric test products.

### **Microsource**

Microsource's primary business is the design of custom Microwave Integrated Components, or MIC, for the communications and defense electronics markets as well as the production of MIC components using chip and wire assemblies. Modern high performance aircraft require RADAR filters to block electromagnetic inference generated by other electronic systems. Our Microsource Division offers a line of tunable, synthesized Band Reject Filters (BRF) for RADAR/EW applications. These high-speed, tunable notch filters can quickly block interference from continuous wave and narrow-band emissions. Using proprietary driver and PLL technology, these filters offer tuning speeds that are up to ten times faster than open loop YIG filters designs. We design these products specifically for each application.

FIG 1: Multi-sphere tunable YIG band reject filter

While our RADAR filter technology may be used in a variety of operational applications and as components of a variety of microwave instruments and devices, Microsource's two largest customers are prime contractors for whom we develop and manufacture RADAR filters used in fighter aircraft. Microsource serves the aftermarket for operational hardware associated with the United States Government's RADAR Modernization Program for prior generation fighter aircraft (i.e., the F/A-18E, F-15D and F-16 jets) to extend their useful lives. These RADAR filters are designed to withstand the rigors of operating under extreme conditions. They must be able to operate while exposed to the shock, vibration and temperature extremes experienced during jet flight and must be able to operate using convection and radiation cooling only with no heat sinking to aircraft.

Our customers require that Microsource be certified to the stringent AS9100D aerospace quality standard. Microsource routinely maintains a “gold supplier” rating from its customers and received the Supplier of the Year award from one of our systems integrator customers.

Microsource’s revenues have grown as prime contractors have begun upgrades on additional aircraft. Initially Microsource supplied filters for one fighter jet, the F/A-18E, with an average revenue stream of \$927,000 per quarter during the 2012 and 2013 fiscal years. In our 2014 fiscal year, the prime contractor added a second aircraft, the F-15, increasing the revenue to an average of \$1,772,000 per quarter for the combined 2014, 2015 and 2016 fiscal year period. During our 2017 fiscal year, a second prime contractor added a third aircraft, the F-16, and Microsource’s revenue climbed again to an average of \$2,026,000 per quarter for the combined period including fiscal years 2017 and 2018 and the first quarter of fiscal year 2019 (in the first quarter of fiscal year 2019 the Company reported revenue using ASC 606. Using ASC605 accounting, the revenue for Q1FY19 would be \$2.3M and the average revenue for FY17, FY18, and Q1FY19 would be \$1.96M).

The following table illustrates Microsource’s revenue growth during the period including fiscal years 2012 through 2018 and the first quarter of fiscal 2019, in which we delivered approximately 500 filters during this time period (dollars in thousands).

We expect our filter technology will continue to be a significant source of our revenue. There are over 3,000 potential domestic and foreign F-15, F-16 and F-18 aircraft that have not been upgraded, likely requiring multiple filters per aircraft. We may also have the opportunity to develop and sell RADAR filters to customers for other types of aircraft.

### **Giga-tronics Division**

Our Giga-tronics Division designs, manufactures and markets a family of functional test products for the RADAR and electronic warfare, or RADAR/EW segment of the defense electronics market. Our RADAR/EW test products are used to evaluate the performance of RADAR/EW systems. Giga-tronics Division customers include major prime defense contractors, the armed services (primarily in the U.S.) and research institutes.

The original Giga-tronics product line consisted of a general purpose parametric test products used for the design, production, repair and maintenance of products in the aerospace and telecommunications equipment marketplace. As the general purpose test market became a commodity business, our revenues and gross margins declined, as illustrated in the following table (revenues of commodity test business, dollars in thousands):

In 2011, we decided to divest of this declining commodity business, and to build on our Microwave expertise and our familiarity with RADAR systems by focusing on the RADAR/EW test market. We believe the RADAR/EW test product market offers greater long-term opportunities for revenue growth as the demand for testing equipment may increase as RADAR/EW systems become increasingly complex. We also believe the RADAR/EW test market offers improved gross margins compared the general purpose test equipment marketplace because our RADAR/EW test systems involve proprietary and highly specialized technology.

Today, the Giga-tronics Division designs, manufactures and markets a family of functional test products aimed primarily for testing RADAR/EW equipment. These functional products represent building blocks in the construction of test systems used to validate the performance of RADAR/EW equipment, and they comprise our Advanced Signal Generation and Analysis System or ASGA.

#### *RADAR/EW Testing Technology*

The RADAR/EW test environment is challenged today by the extreme complexity of the RADAR and countermeasure devices. RADAR and countermeasure devices may be cognizant, meaning that they recognize each other, and adaptive, meaning that they adapt to what they recognize, changing their behavior. For example, if a RADAR determines that it is being jammed, it will change its signals to avoid the jamming. This greatly adds to the challenge of testing these devices due to the nearly endless combination of possible outcomes. Our customers employ a test methodology called “Hardware-in-the-loop” (HIL) as the only means to perform meaningful tests on these devices short of field and flight trials. Adding to the complexity is that multiple RADARs from multiple aircraft may work together, while multiple jammers try to fool the multiple RADARs.

RADAR/EW designs and testing requirements are very specific and vary depending on the aircraft and its mission and developments in RADAR/EW countermeasures. This specificity and complexity require customized test solutions for each test situation. Such solutions may cost more than \$10 million per test system, and have high cost of ownership, often requiring lengthy (several hours) and frequent calibration. Further, testing complex RADAR/EW devices requires a system with multiple channels; traditional test solutions were not designed for this application and do not scale well in terms of size or costs.

### **Giga-tronics' Solution**

We developed our ASGA test systems to address these challenges with three primary goals:

1. Our solution, which combines our ASGA platform with digital processing hardware and firmware, provides a test solution that may be customized with relative ease compared to traditional test systems.  
Our ASGA solution was designed specifically for Hardware-in-the-Loop HIL testing and offers a real-time,
2. dynamic, closed loop test solution that simulates these adaptive/cognitive RADAR/EW devices for RADAR design and testing purposes.
3. Our ASGA solution is scalable, allowing us to build test systems with multiple channels that scale well both in terms of size and costs compared to traditional systems.

We are developing our testing and simulation platform in phases:

Initially, we developed a subsystem that replicates the radio frequency (RF) environment that the device being tested, such as a RADAR or jammer, will experience when it is placed in service to allow an accurate assessment and improvement of its effectiveness prior to deployment. We call this subsystem an Advanced Signal Generator, or ASG.

Next, we developed subsystem solutions for recording both the RF stimulus from the infrastructure and the RF responses from the device being tested. The recordings may be used subsequently to analyze and determine whether the device is operating correctly and to improve its effectiveness. We call this subsystem an Advanced Signal Analyzer, or ASA

Next, we began to develop a complete test solution by combining our ASG with a digital generation system from a third party vendor

Finally, we are working on a closed loop solution by combining the ASGA with the digital generation and analysis systems

The developments of the ASG and ASA subsystems as well as the full system solution with digital generation are complete and have been delivered to customers. We continue to develop our closed loop solution.





We developed our ASGA solution in three phases. First, building on our microwave RADAR component expertise, we developed a Microwave Up-Converter, a Down-Converter, and a Power Amplifier. Second, we developed an open loop Radar/EW Test solution, allowing us to offer a complete test system as opposed to providing subsystems only. Finally, we are combining our ASGA solution with proprietary with digital processing hardware and firmware, to create a closed loop test solution that may be customized with relative ease compared to traditional systems.

### *ASGA*

Building on our Microwave RADAR component expertise, we developed a custom Microwave Up-Converter, Down-Converter, and Power Amplifier as shown below:

Providing “custom” test solution requires an architecture that can easily be adapted to different test requirements. The common testing systems architecture uses an analog RF (Radio Frequency) synthesizer followed by an IQ (in-phase, quadrature) modulator. This analog architecture does not lend itself to easy customization or closed loop testing. Our Giga-tronics products employ a digital front-end at lower Intermediate Frequencies (IF) while the complex RF Microwave sub-system is isolated and remains unchanged. This paradigm shift of replacing the synthesizer with an up-converter has many other advantages: (1) It mimics the architecture of real RADARs, which makes it an optimum fit for HIL test approaches, (2) it allows the RADAR/EW engineers to work in a manner they are accustomed to and (3) it is easily upgradable to implement the latest threat scenarios.

Our microwave sub-system includes individual calibrated transmit channels called the Advanced Signal Generator (ASG) and individual calibrated receive channels called the Advanced Signal Analyzer (ASA). A System Reference Module (SRM100A) shared between the ASG and ASA modules along with an industry standard AXIe chassis completes the platform. The platform’s architecture facilitates building test systems with reduced size, weight and cost compared with traditional solutions, especially when the test system is required to have multiple transmitters and receivers.

Customers typically integrate the ASG sub-system with third party hardware and software to form a specific test solution for each RADAR/EW asset to be validated. We have sold these sub-systems to self-integrators as shown below

**in \$**

*Custom Test Solutions*

In 2017, we moved into the second phase, providing complete custom test solutions rather than just sub-systems. Some examples of test solutions integrated by Giga-tronics are our Real-Time Threat Emulation System (TEmS) and the Multi-Aircraft signal generator sold to the US Navy at its Naval Air Station in Pt. Mugu, California as shown below:

*Closed Loop Custom Test Solutions*

We are currently entering the third phase in our 2019 fiscal year, providing a closed loop test solution. This is achieved by “mirroring” the up-converter to make a companion down-converter:

By using the identical architecture and components for the down-converter, our testing solution achieves the ability to pick out and follow a single emitter within a dense signal environment – a critical capability for building a closed loop simulation of a RADAR or Countermeasure device.

This microwave sub-system is then complemented with our customized digital processing hardware and firmware to create our closed loop test solutions where customization for a specific RADAR /EW system test is performed at the digital level, without changing the microwave subsystem.

With over \$10 million of test systems installed and being utilized by 8 customers, we believe our ASGA solution has been validated.

Our Microsource RADAR filters business continues to be a reliable base business. It generated an average of \$7 million in annual sales over the past three fiscal years, with 40% in average annual gross margins over the same period. As a sole source supplier with respect to the F-14s, F-15 and F-18 upgrade programs, we believe this will continue to be a reliable source of revenue over the next several years.

*Summary*

In summary, we have completed a difficult transition, divesting our commodity test business and investing heavily in our RADAR/EW test business. This transition is now complete. In our 2018 fiscal year, we reduced operating expenses by 30% compared to fiscal 2016, our gross margins during the last two quarters increased from the mid 20% to above 40%, resulting in an operating loss of \$70,000 for the quarter ended June 30, 2018, compared to an operating loss of \$1.16 million during the same quarter one year earlier:

**Corporate Strategy**

Our objective is to maintain our position as a sole source provider of RADAR filter solutions for prior generation fighter jet aircraft and to become a leading supplier of electronic test systems to government facilities and defense prime contractors tasked with evaluating the performance of RADAR/EW systems. Key elements of our strategy include:

Penetrate Our Core Markets

We believe our RADAR/EW test solutions offer significant competitive advantages compared to traditional testing systems. We intend to capitalize on our technology leadership to further our market share position in our core markets, where our customers include the US Navy, US Air Force and US Army and prime contractors and test directorates who are developing the devices being tested at the military bases.

### Refine our Sales Strategy

Selling custom test solutions required that we change our sales methodology, as we shifted from selling parametric test instruments “boxes” to working with potential customers in a business development approach. As such, we have changed our sales team to a business development team comprised of people who know our customers and potential customers, understand their needs and are able to propose test solutions. We are developing a field sales force, locating personnel near key military and OEM customers within the RADAR/EW marketplace. This salesforce will have the technical expertise needed to properly understand our customer’s needs and provide the optimal solution to position our highly complex, innovative platform.

### Provide Proactive Customer Support

We are developing strategic relationships with on-base contractors to provide on-site support for our fielded test systems. We believe this is critical in the success of operating systems of this complexity. We plan to establish additional locations as our customer base grows.

### Enter New Geographic Markets Rapidly

We intend to bring our RADAR/EW test solutions to new international markets. To do so, we will rely on our relationships at key prime contractors and military customers in France, Israel, Italy and the United Kingdom, for example. We also expect to use sales representative organizations that have relationships with prime contractors and technical expertise in radar testing.

### Expand the Microsource component business

We believe our YIG based tracking filter technology is positioned well with prime fighter aircraft manufacturers. We expect our filter technology will continue to be a major source of our revenue. Our goal is to take technology from the RADAR/EW test platform, miniaturize and ruggedize with our chip and wire technology, and provide additional Microwave modules to the same prime manufacturers to whom currently provide our test solutions.

## **Competition**

We primarily compete in two different products markets: Microsource’s RADAR filters and Giga-tronics RADAR/EW test systems.



*Microsource*

Microsource is a sole source supplier serving the aftermarket for operational hardware associated with the US Government's RADAR Modernization Program (RMP) for prior generation fighter jet aircraft (i.e., the F/A-18E, F-15D and F-16 jets) to extend their useful lives. Our Microsource division supplies YIG filters specifically designed for military aircraft to solve interference problems caused by newer, more powerful RADARs. The prime contractors responsible for integrating the new RADARs have over several years flight qualified our filters at considerable expense. Only a few other companies possess the technical know-how to design and manufacture filters of this nature, such as Teledyne and Micro-Lambda Wireless, but we believe the expense of developing and requalifying a new component is prohibitive to the point where the prime contractor would only undertake such an effort if significant issues, such as significant technical deficiencies, were to arise.

*Giga-tronics Division*

The Giga-tronics Division serves the electronic test market with a microwave platform used in the evaluation of military RADAR/EW systems. These applications represent niche segments within the broader test equipment market. While the niche market segments of RADAR/EW are large enough to be meaningful to Giga-tronics, we believe they are too small to attract larger competitors, such as Agilent/Keysight, Rohde & Schwarz and National Instruments who, to our knowledge, do not approach these markets with new dedicated solutions.

We have developed a unique approach to address the RADAR/EW test requirements that are adaptive/cognitive. Testing these new RADAR and jamming (i.e. interference) signals is best solved by a real time, closed loop, dynamic simulation system. We believe our Giga-tronics RADAR/EW solutions present a paradigm shift providing a closed loop test capability that is unavailable elsewhere. Our competitors often have greater resources in research, development and manufacturing and substantially broader product lines and channels. To compete, we place strong emphasis on maintaining a high degree of technical competence as it relates to the development of new microwave products, are highly selective in establishing technological objectives and focus sales and marketing activities in the selected niche areas that are weakly served or underserved by our competitors. Competitors that make alternative equipment to the Giga-tronics Advanced Signal Generation and Analysis (ASGA) system include ELCOM (a division of Frequency Electronics Inc.), COMSTRON (a division of Cobham Plc) and EWST (a division of Ultra Electronics Plc). Compared to Giga-tronics, these competitors are of comparable size or have small product divisions with more limited product lines. Two much larger companies, Northrop Grumman/Amherst and Textron/AAI sell open loop equipment that competes with the Giga-tronics ASGA solutions, albeit at a much higher selling price. These test systems from Northrop Grumman and Textron have long delivery schedules, represent expensive capital investments to the customers that buy them and typically are shared among a large number of users generally limiting access to their testing capabilities. Giga-tronics can complement these larger test systems by uniquely addressing the new closed loop test requirements for the next generation RADAR/EW devices and by offering smaller, lower cost and more flexible testing solutions that can be delivered more quickly, which greatly increases a user's access to systems test capability and reduces the risk of program failure.

### **Proprietary Technology and Intellectual Property**

Our competitive position is largely dependent upon our ability to provide performance specifications for our instruments and systems that (a) are easy to use and effectively and reliably meet customers' needs and (b) selectively surpass competitors' specifications in competing products. Patents may occasionally provide some short-term protection of proprietary designs. However, because of the rapid progress of technological development in our industry, such protection is most often, although not always, short-lived. Therefore, although we occasionally pursue patent coverage, we place major emphasis on the development of new products with superior performance specifications and the upgrading of existing products toward this same end.

Our products are primarily based on our own designs, which are derived from our own engineering abilities. If our new product engineering efforts fall behind, our competitive position weakens. Conversely, effective product development greatly enhances our competitive status.

We have maintained four non-provisional patents related to our legacy 2500B parametric signal generator product line, which was not among the legacy products that we have sold. These patents describe advanced synthesis techniques and potentially can be extended for use with the Giga-tronics ASGA system and to a number of Microsource synthesizer components. Additionally, we filed a provisional U.S. patent relating to the ASGA system in June of 2016 and subsequently filed a non-provisional application in June of 2017. The patent application describes the internal design of the ASG and ASA along with the architecture of how all the components work together to

facilitate building multi-channel test systems with reduced size, weight and cost as compared to present solutions. The application for the non-provisional patent is currently pending before the U.S. patent office.

We are not dependent on trademarks, licenses or franchises. We utilize certain software licenses in certain functional aspects for some of our products. Such licenses are readily available, non-exclusive and are obtained at either no cost or for a relatively small fee.

In September 2015, we entered into a software development agreement with a major aerospace and defense company whereby the aerospace company developed and licensed its simulation software to us. The simulation software (also called Open Loop Simulator or OLS technology), which is owned by the aerospace company and licensed to us, allows our ASGA system to coordinate with various third-party hardware elements to generate the signals for testing RADAR/EW equipment. We license the OLS software as a bundled or integrated solution with our TEmS product.

## **Employees**

As of June 30, 2018, and June 30, 2017, we employed 43 and 52 individuals on a full-time basis, respectively. We believe that our future success depends on our ability to attract and retain skilled personnel. None of our employees are represented by a labor union, and we consider our employee relations to be good.

## Legal Proceedings

From time to time, we are involved in various disputes and litigation matters that arise in the ordinary course of business. As of June 30, 2018, we had no material pending legal proceedings.

## MANAGEMENT

Set forth below is certain information regarding our executive officers and directors. Each of the directors listed below was elected to our board of directors to serve until our next annual meeting of shareholders or until his or her successor is elected and qualified. All directors hold office for one-year terms until the election and qualification of their successors. The following table sets forth information regarding the members of our board of directors and our executive officers:

Name	Age	Position
Gordon L. Almquist	68	Director
Lutz P. Henckels	77	Director, Executive Vice President and Interim Chief Financial Officer
John R. Regazzi	63	Chief Executive Officer and Director
William J. Thompson	53	Director, Chairman of the Board
Armand Pantalone	53	Chief Technology Officer
Timothy Unsprang	57	Vice President Sales and Marketing
Jamie Weston	53	Director

*Gordon L. Almquist* has served as a member of our board of directors since 2012. Mr. Almquist has more than 30 years of experience in senior financial management roles at public and private technology companies. From August 2009 until his retirement in June 2016, Mr. Almquist served as the Vice President and Chief Financial Officer of Keyssa, Inc. (formerly known as WaveConnex, Inc.), a semiconductor technology company headquartered in Campbell, CA. Prior to Keyssa, he held similar positions at Strix Systems, where he was also a co-founder, and at publicly-traded companies including Vertel Corporation and 3D Systems Corporation. Mr. Almquist also served on the board of directors for CAP Wireless (acquired by TriQuint Semiconductor in 2013). Mr. Almquist is a certified public accountant (inactive) in the State of California and holds a bachelor's degree in business administration (accounting) from California State University, Northridge.

*Lutz P. Henckels* has served as a member of our Board since 2011. Dr. Henckels is a managing member of Alara Capital AVI II, an investment fund. He was appointed the Executive Vice President and interim Chief Financial Officer of Giga-tronics in February 2018. Prior to joining Giga-tronics as an officer, Dr. Henckels was Chairman and Chief Executive Officer of HiQ Solar which produces solar inverters for the commercial market from May 2013 to December 2017. Dr. Henckels has over 40 years' experience serving as Chief Executive Officer of the private and

public technology companies HiQ Solar, SyntheSys Research (acquired by Tektronix/Danaher), LeCroy Corporation, and HHB Systems. Dr. Henckels is the recipient of the first John Fluke Sr. Memorial Award, along with David Packard, Joe Keithley, and Alex D'Arbeloff. The John Fluke Sr. Memorial Award was established in 1986 to honor executives who have led their companies with innovative engineering or business management. Dr. Henckels holds a Bachelor of Science and Master of Science in Electrical Engineering and PhD in Computer Science from the Massachusetts Institute of Technology. He graduated Eta Kappa Nu and Tau Beta Pi, and is also a graduate of the OMP program of Harvard Business School. Dr. Henckels has been a director of multiple publicly traded companies, including Ikos, Inframetrics, and LeCroy.

*Armand Pantalone* was promoted to the position of Chief Technology Officer on June 11, 2018. Mr. Pantalone joined Giga-tronics in July 2016 as the Director of RADAR/EW Test Solutions. Prior to joining the Company, Mr. Pantalone worked at Raytheon's Integrated Defense Systems Division from July 1996 to June 2016. In his 20 years at Raytheon, he held a variety of technical and leadership positions associated with RADAR and missile defense programs. Previous experience includes 10 years at Northrop Grumman/Nordeen Systems as an RF & Microwave engineer specializing in the design of RADAR systems including system integration and flight testing. Mr. Pantalone graduated from Clarkson University in Potsdam, NY with a dual degree in Electrical and Computer Engineering.

*John R. Regazzi* has served as a member of our Board since 2006. He has been our Chief Executive Officer since February 2018. Previously he was Co-Chief Executive Officer beginning in June 2017 and Chief Technology Officer beginning in August 2016. From 2006 to August 2016, he was the President and Chief Executive Officer of the Company. Prior to that, Mr. Regazzi held the following positions within the Giga-tronics Instrument Division: President and General Manager, Vice President of Operations, and Vice President of Engineering. Mr. Regazzi also serves as the Company's Secretary. Prior to Giga-tronics Mr. Regazzi was with Hewlett Packard and Keysight for 22 years in various design and management positions associated with their microwave sweeper and synthesizer product lines. Mr. Regazzi holds a Bachelor of Science in Electrical Engineering from Rutgers University and a Master of Science in Electrical Engineering from Lehigh University.

*William J. Thompson* has served as Chairman of our board of directors since August 2016 and has been a member of our Board since 2011. Dr. Thompson served as our Acting Chief Executive Officer from August 2016 until June 2017. Dr. Thompson is a Managing Member of Alara Capital AVI II and was Director of Research for Jacobi Capital Management. Dr. Thompson co-founded Circadiant Systems (acquired by JDS Uniphase Corporation), a venture capital backed test company that designed and manufactured instrumentation for optical communication. Dr. Thompson also served as a Member of Technical Staff at Lucent Technologies where he designed analog RF optoelectronic components for high speed optical communication, and as a researcher with the University of Maryland. Dr. Thompson graduated *summa cum laude* with a Bachelor of Science in Physics from University of North Carolina at Charlotte and holds a Ph.D. in Physics from Stony Brook University. He graduated as a Palmer Scholar with an MBA in Finance from the Wharton School of the University of Pennsylvania.

*Timothy Ursprung* was appointed to the position of Vice President Sales and Marketing in July, 2018. Prior to joining the Company, Mr. Ursprung worked at Rodelco Electronics Corporation as the head of sales in the RF/Microwave Integrated Microwave Assembly marketplace promoting Highly Complex solutions for Electronic Warfare and Radar applications from April 2014 to June 2018. Prior to Rodelco, from July 2005 to January 2014, Mr. Ursprung owned and operated a manufacturer's representative firm, EOX Sales LLC, covering the Mid-Atlantic and Southeast regions of the United States. In addition, Mr. Ursprung was Vice President Sales and Marketing for Aeroflex Test Solutions for ten years in charge of all activities in the Americas from July 1995 to June 2005. Mr. Ursprung graduated from Clarkson University in Potsdam, NY with a degree in Engineering and Management.

*Jamie Weston* has served as a member of our Board since 2016. Mr. Weston is a Managing Director at Spring Mountain Capital, a private equity firm, and has been with the firm since 2011. Spring Mountain Capital is the largest

investor in Alara Capital AVI II, the Company's largest shareholder. Mr. Weston was previously a Partner at The Wicks Group of Companies, a private equity firm with close to \$1 billion under management, focused on selected segments of the information, education, and media industries. During his 15 years at Wicks, he was an integral part of its investment and management activities, and served on the board of directors of many of its portfolio companies. While at Wicks, he directly structured and negotiated acquisitions and divestitures and other transactions. Prior to Wicks, Mr. Weston worked at IBJ Whitehall Bank & Trust Company and National Westminster Bancorp, where he completed leveraged financings. Mr. Weston received his M.B.A. from Fordham University and graduated cum laude from Drew University with a B.A. in Economics.

#### **Director or Officer Involvement in Certain Legal Proceedings**

Our directors and executive officers were not involved in any legal proceedings described in Item 401(f) of Regulation S-K in the past ten years.

## **Directors and Officers Liability Insurance**

We have directors' and officers' liability insurance insuring our directors and officers against liability for acts or omissions in their capacities as directors or officers, subject to certain exclusions. Such insurance also insures us against losses, which we may incur in indemnifying our officers and directors. We have also entered into agreements with our executive officers and directors. In addition, officers and directors also have indemnification rights under applicable laws, and our certificate of incorporation and bylaws.

## **Committees of the Board of Directors**

Our Board has an Audit Committee, a Compensation Committee and a Nominating and Governance Committee. Each committee has a charter, each of which posted on the investor relations section of our website, [www.Giga-tronics.com](http://www.Giga-tronics.com), under the heading "Governance – Governance Documents."

### *Audit Committee*

The Audit Committee consists of directors Gordon L. Almquist (Chairman), William J. Thompson, and Jamie Weston. While Mr. Almquist and Mr. Weston, are considered to be independent under the director independence standards of the Nasdaq Stock Market applicable to audit committee members, Dr. Thompson is not considered to be independent under this standard because he was the Company's co-Chief Executive Officer from August 2016 to June 2017. The Audit Committee serves to monitor the effectiveness of the independent audit, as well as the Company's accounting, financial controls and financial reports. The Audit Committee must pre-approve all non-audit services provided by the Independent Registered Public Accounting Firm. The Audit Committee held four meetings during the past fiscal year. For fiscal 2018, the Board has determined that Gordon L. Almquist, as the financial expert, had:

- (i) an understanding of generally accepted accounting principles and financial statements;
  
- (ii) the ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves;
  
- (iii) experience preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can



reasonably be expected to be raised by the registrant's financial statements, or experience actively supervising one or more persons engaged in such activities;

(iv) an understanding of internal control over financial reporting; and

(v) an understanding of audit committee functions.

Therefore, the Board determined that Mr. Almquist is the Audit Committee's financial expert for purposes of the Nasdaq Stock Market rules and requirements of the Sarbanes-Oxley Act of 2002.

#### *Compensation Committee*

The Compensation Committee consists of directors Jamie Weston (Chairman), Gordon L. Almquist and William J. Thompson. Mr. Weston and Mr. Almquist are independent under the independence standards of the Nasdaq Stock Market but Dr. Thompson is not because he served as the Company's Acting Chief Executive Officer during 2016 and 2017. The Compensation Committee formulates recommendations to the Board regarding levels of compensation for management. In addition, in order to recognize the expected future contributions of key employees and provide an additional incentive for them to remain with Giga-tronics over the long-term, the Compensation Committee awards options to purchase shares of our common stock and other forms of equity awards. The Compensation Committee reviews and approves all stock options and executive compensation.

The Compensation Committee did not engage any compensation consultants in determining or recommending executive officer compensation for fiscal 2018.

*Nominating and Governance Committee*

The Nominating and Governance Committee (the “Nominating Committee”) consists of directors Jamie Weston (Chairman), William J. Thompson, and Lutz P. Henckels. While Mr. Weston is considered to be independent under the director independence standards of the Nasdaq Stock Market, Dr. Henckels is not considered to be independent under this standard because he became the Company’s Acting Chief Financial Officer in February 2018 and Dr. Thompson is not considered to be independent because he served as our co-Chief Executive Officer during 2017. The purpose of the Nominating Committee is to recommend persons for membership on the Board, to establish criteria and procedures for the selection of new directors, and to evaluate and recommend to our Board any revisions to our corporate governance guidelines. The Nominating Committee made no recommendations with respect to nominees for the 2018 Annual Meeting and instead, the nominees, each of whom is currently a director, were selected by our Board.

The Nominating Committee has no formal process for identifying and evaluating candidates. Existing directors identify suitable candidates as the need arises. The Board’s policy is to consider any director candidate nominated or recommended by a shareholder in the same manner that it would consider a candidate nominated by the Board or Nominating Committee. In the past year, the Company did not receive any recommendations for director candidates from any shareholders. Shareholder recommendations should be submitted in writing to the Company by mail at its main office at least 120 days in advance of the anniversary date of the mailing of notice of the previous year’s annual meeting and should include sufficient biographical information (including all information that would be required to be disclosed in a proxy statement for a shareholder meeting at which directors are to be elected) for the committee to make an initial evaluation of the candidate’s qualifications. The Company has never engaged or paid a fee to a third party search firm in connection with the nomination of a candidate for director.

The Nominating Committee considers the following criteria in proposing nominations for director to the full Board: independence; high personal and professional ethics and integrity; ability to devote sufficient time to fulfilling duties as a director; impact on diversity of the Board, including skills and other factors relevant to the Company’s business; overall experience in business, education, and other factors relevant to the Company’s business. At a minimum, the Nominating Committee must be satisfied that each nominee, both those recommended by the Nominating Committee and any recommended by shareholders, meets the following minimum qualifications:

The nominee should have a reputation for integrity and honesty.

The nominee should have demonstrated business experience and the ability to exercise sound judgment.

The nominee should have an understanding of the Company and its industry.

The nominee should have the ability and willingness to act in the interests of the Company and its shareholders.

The nominee should not have a conflict of interest that would impair the nominee’s ability to fulfill the responsibilities of a director.

The Nominating Committee has adopted a Code of Ethics applicable to all directors, officers and employees. The Company will provide to any person without charge, upon request, a copy of such Code of Ethics upon written request

mailed to the Company at its main office, to the attention of the Corporate Secretary. The Nominating Committee has no formal policy on the consideration to be given to diversity in the nomination process, other than to seek candidates who have skills and experience that are appropriate to the position and complementary to those of the other board members or candidates.

*Compensation Committee Interlocks and Insider Participation*

No current or former executive officer or other employee of Giga-tronics serves as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of the Giga-tronics Board or Compensation Committee.

**Board Leadership Structure**

The positions of Chairman of the Board and Chief Executive Officer are currently held by different persons. The Board believes that having a separate chairman helps enable the Board to maintain an independent perspective on the activities of the Company and executive management. Periodically, the Board assesses the roles and the Board leadership structure to ensure the interests of the Company and the shareholders are best served.

## Board Risk Oversight

The Company's senior management manages the risks facing the Company under the oversight and supervision of the Board. While the full Board is ultimately responsible for risk oversight at the Company, the Audit Committee assists the Board in fulfilling its oversight responsibilities with respect to risk in the areas of financial reporting and internal controls. Other general business risks such as economic and regulatory risks are monitored by the full Board.

## Director Independence

Our board of directors has determined that Messrs. Almquist and Weston, are independent under the independence standards of The Nasdaq Stock Market. Mr. Regazzi and Dr. Henckels are not independent under this standard because of their employment with the Company. Dr. Thompson is not independent under this standard because he served as co-CEO of the Company in 2017. There are no family relationships between any of our directors or executive officers.

## EXECUTIVE COMPENSATION

The table below sets forth, for the last two fiscal years, the compensation earned by (i) each individual who served as our principal executive officer or principal financial officer, and (ii) our most highly compensated executive officers, other than those listed in clause (i) above, who were serving as executive officers at the end of the last fiscal year (together, the "Named Executive Officers"). No other executive officer had annual compensation in excess of \$100,000 during the last fiscal year.

### Compensation of Officers

The following table provides information for the indicated fiscal years concerning compensation earned by each person serving as Giga-tronics' chief executive officer during the most recent fiscal year, which ended March 31, 2018, and each other executive officer who earned more than \$100,000 during such fiscal year.

Name and Position	Fiscal Year	Salary	Bonus	Option	All Other	Total
		(\$)	(\$)	Awards(\$)(1)	Compensation (\$)	Total (\$)(2)

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John R. Regazzi	2018	\$217,691	\$—	\$ 63,841	\$ 1,144	\$282,676
Chief Executive Officer	2017	250,000	—	—	1,795	251,795
Suresh Nair	2018	169,495	—	—	1,641	171,136
Former Co-Chief Executive Officer (3)	2017	0	—	—	—	—
William J. Thompson	2018	67,134	—	—	—	67,134
Former Acting Chief Executive Officer (4)	2017	146,154	—	—	—	146,154
Lutz P. Henckels	2018	20,000	—	132,000	35,078	187,078
EVP and Interim Chief Financial Officer (Principal Accounting Officer) (5)	2017	0	—	—	—	—
Michael R. Penta (6)	2018	72,987	54,713	—	637	128,337
Former Vice President, Sales	2017	200,000	80,426	—	3,183	283,609
James Taber	2018	166,076	8,848	—	1,425	176,349
Former Vice President, Sales and Marketing (7)	2017	0	—	—	—	—
Temi Oduozor (8)	2018	161,515	—	—	1,504	163,019
Former Corporate Controller	2017	95,684	—	—	806	96,490

(1) Mr. Regazzi was granted 100,000 new stock options exercisable at \$0.33 per share on March 30, 2018. On March 30, 2018, the Company repriced Mr. Regazzi's option for 100,000 shares expiring December 14, 2021 with an original exercise price of \$1.64 per share, his option for 99,750 shares expiring on August 22, 2022 with an exercise price of \$1.42 per share and his option for 100,000 shares expiring March 13, 2023 with an exercise price of \$1.65 per share. As repriced, the exercise price for each option is \$0.33 per share, which was the fair market value per share on March 30, 2018. In connection with his appointment as Interim Chief Financial Officer, Dr. Henckels received a special grant of a non-qualified option for 400,000 shares of common stock exercisable at \$0.33 per share on March 30, 2018.

(2) Includes consulting fees for Dr. Henckels of \$35,078 during the 2018 fiscal year and matching contributions made by Giga-tronics to its 401(k) Plan.

(3) Employment terminated as of December 22, 2017.

(4) Employment terminated on June 21, 2017.

(5) Appointed Executive Vice President and Interim Chief Financial Officer as of February 22, 2018.

(6) Employment terminated on July 7, 2017.

(7) Employment terminated on May 4, 2018.

(8) Employment terminated as of February 23, 2018.

The Company does not have employment agreements with any of its executive officers, though it has entered into to change in control agreements with certain officers as described below.

### Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information about stock options held by the named executive officers outstanding as of March 31, 2018, the end of the Company's 2018 fiscal year. All option exercise prices were based on market price on the date of grant.

### Outstanding Equity Awards at Fiscal Year-End

Name	Shares subject to	Shares subject to	Option	Expiration Date
	Unexercised Options	Unexercised Options	Exercise Price (\$)	
(a)	(b)	(c)	(d)	(e) (1)
John R. Regazzi (2)	—	100,000	\$ 0.33	3/30/2028
	100,000	—	\$ 0.33	12/15/2021
	99,750	—	\$ 0.33	8/22/2022
	100,000	—	\$ 0.33	3/13/2023
Suresh Nair	10,000	40,000	\$ 1.26	4/27/2026
William J. Thompson	15,000	—	\$ 1.64	12/15/2021
	18,000	—	\$ 1.53	4/24/2023
	4,400	1,100	\$ 2.47	7/1/2024
	3,300	2,200	\$ 1.84	2/25/2025
Lutz P. Henckels	2,200	3,300	\$ 2.47	7/1/2024
	—	400,000	\$ 0.33	3/30/2028
Jim Taber	5,000	20,000	\$ 0.84	2/22/2027
Temi Oduozor	21,000	14,000	\$ 1.48	12/17/2024

Column (e) shows the contractually scheduled expiration date. In case of the termination of employment of (1) Messrs. Nair, Taber and Ms. Oduozor, the exercise period expires 90 days after termination of employment rather than on the original contractually scheduled expiration dates.

On March 30, 2018, the Company repriced Mr. Regazzi's option for 100,000 shares expiring December 14, 2021 with an original exercise price of \$1.64 per share, his option for 99,750 shares expiring on August 22, 2022 with (2) an exercise price of \$1.42 per share and his option for 100,000 shares expiring March 13, 2023 with an exercise price of \$1.65 per share. As repriced, the exercise price for each option is \$0.33 per share, which was the fair market value per share on March 30, 2018.

**Equity Compensation Plan Information**

The following table provides information on options and other equity rights outstanding and available at March 31, 2018.

**Equity Compensation Plan Information**

<b>Plan Category</b>	No. of securities to be issued upon exercise of outstanding options, stock awards, warrants and rights	Weighted average exercise price of outstanding options, stock awards, warrants and rights	No. of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	<b>(a)</b>	<b>(b)</b>	<b>(c)</b>
Equity compensation plans approved by security holders	1,478,700	\$ 0.56	456,677
Equity compensation plans not approved by security holders-options (1)	400,000	0.33	n/a
<b>Total</b>	<b>1,878,700</b>	<b>\$ 0.51</b>	<b>456,677</b>

(1) Reflects a grant of nonqualified options for 400,000 shares of common stock to Dr. Henckels in consideration of employment of an employee and officer. The exercise price is \$0.33 per share and the vesting schedule is 25% after one year and 1/48th of the original grant each month thereafter.

On September 20, 2018, our shareholders approved our new 2018 Equity Incentive Plan under which we may issue up to 2,500,000 shares of common stock upon the exercise options, stock awards and grants. With the adoption of the 2018 Equity Incentive Plan, no further awards will be issued under the 2015 Equity Incentive Plan, though all awards under the 2015 Equity Incentive Plan that are outstanding will continue to be governed by the terms, conditions and procedures set forth in the plan and any applicable award agreement.



## **Change-In-Control Arrangements**

All outstanding options may accelerate and become exercisable for fully vested shares of common stock upon a change in control of Giga-tronics, whether effected through merger, sale of substantially all of Giga-tronics' assets, the successful completion of a hostile tender offer for 30% or more of Giga-tronics' outstanding common stock, or a change in the majority of the Board as a result of one or more contested elections for Board membership.

In order to reinforce and encourage the continued attention and dedication of certain key members of management, we have entered into change in control agreements and severance agreements with certain executive officers including Mr. Regazzi and Mr. Ursprung. Under the Company's termination of employment and change of control agreements, officers are entitled to receive some or all of the following benefits: severance pay, payment of coverage premiums for health, dental, and vision benefits for and executive officers and their covered dependents, if any, pursuant to COBRA and accelerated vesting of any unvested restricted stock awards or options to purchase our common stock as of the date of termination.

Under Mr. Regazzi's agreement, he receives such salary and benefits for 15 months for termination in connection with a change of control and 12 months for an involuntary termination other than for cause. Pursuant to Mr. Ursprung's offer letter, the Company intends to enter into its standard form written severance agreement with Mr. Ursprung, providing severance of nine months base salary for an involuntary termination other than for cause.

## Compensation of Directors

For fiscal year 2018, no director received cash payment for services as a director. Mr. Almquist received annual fees of \$89,900 consisting of \$44,000 in cash fees for serving as the Audit Committee Chair; a restricted share award of 26,000 common shares; an option grant for 11,000 common shares which vests at the rate of 20% per year; and \$25,000 in cash for consulting fees. Mr. Henckels earned consulting fees prior to his appointment as our Chief Financial Officer, as reflected in the table below. From time to time, Giga-tronics makes discretionary grants of options to purchase shares of its common stock to directors in consideration for services they provide to Giga-tronics as members of the Board. For fiscal year 2018 no directors other than Mr. Almquist, received a discretionary grant of options. The restricted stock award described above vested fully on March 31, 2018.

The following table summarizes compensation paid to directors (other than Mr. Regazzi, whose compensation in all capacities is included in the Executive Compensation Table as previously set forth) in fiscal year 2018.

### Director Compensation

Name	Fees		Restricted Stock Awards (2) (\$)	Change in	All Other Compensation (3) (\$)	Total (\$)
	Earned or Cash Paid (\$)	Option Awards (1) (\$)		Pension Value and Non-qualified Deferred Compensation Earnings		
Gordon L. Almquist	\$44,000	\$3,740	\$17,160	--	\$25,000	\$89,900
John R. Regazzi	—	\$—	\$—	--	\$--	\$—
Lutz P. Henckels	—	\$—	\$—	--	\$25,000	\$25,000
Jamie Weston	—	\$—	\$—	--	\$--	\$—
William J. Thompson	—	\$—	\$—	--	\$43,269	\$43,269

(1) The value for stock option awards in the table above represents grant date fair value of stock option awards. For option awards, the dollar amount for each individual varies depending on the number of options granted, the fair value of such options, and the vesting terms of such options. See Note 1 of the 2018 Audited Financial Statements for information on the assumptions used to calculate the grant date fair value of option awards and the expense

recognized under ASC 718. At March 31, 2018, Dr. Henckels held options to purchase 405,500 shares of common stock, Dr. Thompson held options to purchase 44,000 shares of common stock, Mr. Almquist held options to purchase 71,500 shares of common stock, and Mr. Weston held no options.

- (2) Restricted shares were granted in lieu of cash compensation for fiscal year 2018 with the weighted average grant date fair value of \$0.66 per share.

Consulting Fees in fiscal year 2018 were \$25,000 for Mr. Almquist and \$25,000 for Dr. Henckels. Cash

- (3) compensation in fiscal year 2018 of \$43,269 for Dr. Thompson was earnings in capacity as co-Chief Executive Officer.

## **CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

### **CHANGE IN ACCOUNTANTS**

Armanino LLP served as the Company's independent registered public accounting firm for the 2018 fiscal year. Crowe LLP ("Crowe") served as the Company's independent registered public accounting firm for the 2017 fiscal year.

On January 4, 2018, the Audit Committee approved the engagement of Armanino LLP as the Company's independent registered public accounting firm for the fiscal year ending March 31, 2018, after completing a competitive bid process. As a result of the engagement of Armanino LLP, the Company dismissed Crowe from that role on that date.

During the Company's two preceding fiscal years and through January 4, 2018, (i) there were no disagreements with Crowe on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure which, if not resolved to Crowe's satisfaction, would have caused Crowe to make reference to the subject matter in connection with their reports on the Company's financial statements for such years; and (ii) there were no reportable events, within the meaning set forth in Item 304(a)(1)(v) of SEC Regulation S-K. Crowe's report on the financial statements of the Company for the Company's 2017 fiscal year included a qualification based on the Company's disclosure that certain matters raised substantial doubt as to the Company's ability to continue as a going concern. Crowe's reports stated that the consolidated financial statements did not include any adjustments that might result from the outcome of this uncertainty.

The Company provided Crowe with a copy of the disclosures in its Form 8-K describing its change in independent accountants and requested that Crowe furnish it with a letter addressed to the SEC stating whether or not Crowe agreed with these statements. Crowe provided such a letter, which the Company included with its Form 8-K filed with the SEC on January 8, 2018.

## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table includes information as of September 28, 2018, concerning the beneficial ownership of Giga-tronics' common stock for each person known by Giga-tronics to own beneficially more than 5% of Giga-tronics' outstanding common stock and common stock equivalents; each director; each executive officer named in the Summary Compensation Table above; and all directors and executive officers of Giga-tronics as a group. In accordance with SEC rules, beneficial ownership includes shares that a person has the right to acquire within 60 days. The address of all officers and directors of Giga-tronics is c/o Giga-tronics Incorporated, 5990 Gleason Drive, Dublin, California 94568.

### Stock Ownership of Certain Beneficial Owners

Name of Beneficial Owner and Position(s) with the Company	Amount and	Percentage of Total
	Nature of	Outstanding Common
	Beneficial	Stock
	Ownership	
Gordon L. Almquist, Director	233,500 (1)	2.12%
Lutz P. Henckels, EVP, Interim Chief Financial Officer and Director	4,117,660 (2)	29.39%
John R. Regazzi, Chief Executive Officer and Director	809,450 (3)	7.04%
William J. Thompson, Chairman of the Board	4,089,776 (4)	29.37%
Jamie Weston, Director	3,956,456 (5)	28.49%
Armand Pantalone, Chief Technology Officer	4,000 (6)	0.40%
Timothy Ursprung, Vice President Sales and Marketing	60,000 (7)	0.55%
All executive officers and directors as a group (7 persons, including those above)	1,397,474 (8)	12.33%

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Alara Capital AVI II, LC 1045 First Avenue King of Prussia, PA 19406	3,956,456 (9) 28.49%
Thomas Leonard 1617 John F. Kennedy Blvd 19th Floor Philadelphia, PA 19103	2,207,000 (10) 17.88%
Porter Capital Management 300 Drakes Landing Road Greenbrae, CA 94904	1,250,000 (11) 10.26%

\* Indicates less than 1%

- (1) Includes 30,000 shares of common stock issuable upon conversion of 300 Series E Shares.  
Includes 120,000 shares of common stock issuable upon conversion of 1,200 Series E Shares. Also includes
- (2) 3,956,456 shares beneficially owned by Alara Capital AVI II, LLC with respect to which Dr. Henckels shares voting and dispositive power as a managing member of Alara Capital AVI II, LLC.
- (3) Includes 200,000 shares of common stock issuable upon conversion of 2,000 Series E Shares.
- (4) Includes 3,956,456 shares beneficially owned by Alara Capital AVI II, LLC with respect to which Dr. Thompson shares voting and dispositive power as a managing member of Alara Capital AVI II, LLC.
- (5) Includes 3,956,456 shares beneficially owned by Alara Capital AVI II, LLC with respect to which Mr. Weston shares voting and dispositive power as a managing member of Spring Mountain Capital.
- (6) Includes 40,000 shares of common stock issuable upon conversion of 400 Series E Shares.
- (7) Includes 60,000 shares of common stock issuable upon conversion of 600 Series E Shares.

- (8) Excludes 3,956,456 shares beneficially owned by Alara Capital AVI II, LLC.
- (9) Includes 1,010,034 common shares, preferred shares convertible to 1,853,351 of common shares and warrants exercisable into 1,093,071 common shares, totaling 3,956,456 of beneficially owned shares.  
Includes 804,000 common shares and warrants exercisable for 603,000 common shares, and 800,000 shares of
- (10) common stock issuable upon conversion of 8,000 Series E Shares, totaling 2,207,000 of beneficially owned shares.  
Information is based on a Schedule 13G filed by Porter Capital Management Co (“PCMC”) on April 2, 2018.  
Includes 950,000 of common stock issuable upon conversion of 9,500 Series E Shares and warrants exercisable for 300,000 common shares, totaling 1,250,000 of beneficially owned shares. Of this total, Porter Partners, L.P.
- (11) holds 8,000 Series E Shares and warrants exercisable into 255,000 common shares and EDJ Limited holds 1,500 Series E Shares and warrants exercisable into 45,000 common shares. PCMC is a general partnership and is the general partner of Porter Partners, L.P. and the investment manager of EDJ Limited. Jeffrey H. Porter is the managing partner of PCMC.

## **SELLING SECURITYHOLDERS**

Up to 11,624,452 shares of common stock are being offered by this prospectus, all of which are being registered for sale for the accounts of the Selling Securityholders. No shares are being sold by the Company. Although the Selling Securityholders may sell their shares at any time the Registration Statement, of which the prospectus is a part is effective, there is no way for the Company to determine when shares will be sold.

Each of the transactions by which the Selling Securityholders acquired their securities from us was exempt under the registration provisions of the Securities Act. The shares of common stock referred to above are being registered to permit public resales of the shares and the Selling Securityholders may offer the shares for resale from time to time pursuant to this prospectus. The Selling Securityholders may also sell, transfer or otherwise dispose of all or a portion of their shares in transactions exempt from the registration requirements of the Securities Act. We may from time to time include additional Selling Securityholders in supplements or amendments to this prospectus.

The table below sets forth certain information regarding the Selling Securityholders and the shares of our common stock offered by them in this prospectus. None of the Selling Securityholders have had a material relationship with us within the past three years other than as described elsewhere in this prospectus. To our knowledge, subject to community property laws where applicable, each person named in the table has sole voting and investment power with respect to the shares of common stock set forth opposite such person’s name. Beneficial ownership is determined in accordance with the rules of the SEC.

Each Selling Securityholder’s percentage of ownership of our outstanding shares in the table below is based on 14,390,605 shares of common stock outstanding as of September 28, 2018, except where noted. The number of shares

beneficially owned after the after this offering assumes that all shares offered hereby are sold.

Name	Shares of	Shares of	Percent
	Common	Common	
	Stock	Beneficially	
	That May	Owned	
	be Sold in	After this	
	this Offering	Offering	
	Shares	Shares	
John R. Regazzi (1)	549,150	<del>269,350</del>	5.63%
Thomas Leonard (2)	804,000	<del>2,207,000</del>	15.34%
Porter Partners, L.P. (3)	400,000	<del>1,850,000</del>	11.47%
Gordon L. Almquist (4)	203,500	<del>203,500</del>	1.62%
Bruce L. and Kathryn M. Evans JTWROS (5)	40,200	130,150	1.18%
Jon D. and Linda W. Gruber Trust (6)	402,011	<del>1,903,508</del>	13.23%
Peter G. Stanley and Susan H. Stanley (7) JTWROS	201,000	<del>850,750</del>	5.92%
Lutz P. Henckels (8)	3,997,660	<del>4,210,060</del>	28.62%
Scott R. McQueen Revocable Trust (9)	241,200	<del>780,200</del>	7.10%
Jay D. Seid (10)	40,200	130,350	1.18%
The Kingdom Trust Company Custodian FBO McBee Butcher, Jr. IRA (11)	32,160	<del>104,280</del>	*
Burt Spottiswoode and Cheri Griffiths JTWROS (12)	64,320	<del>198,240</del>	1.34%
Thomas Tourish (13)	40,200	130,350	1.18%
VFT Special Ventures LTD (14)	-	580,477	4.03%
Rene M. Haas (15)	-	800,000	5.56%
Ernesto K. Halim and Joan-Ina Rosario (16)	-	120,000	*
Daniel Kirby (17)	-	200,000	1.39%
Timothy F. and Kathleen F. Ursprung Joint Tenants (18)	-	60,000	*
Jeffrey Henckels (19)	-	40,000	*
Claire Barresi (20)	-	60,000	*
Robert Cutler (21)	-	60,000	*
Joseph D. Ross (22)	-	100,000	*
Joan Plastiras Revocable Living Trust (23)	-	200,000	1.39%
Jorge A. Briones, Jr. (24)	-	24,000	*
Albert P. Guarino (25)	-	60,000	*
Troy O. and Traci K. Mitchell (26)	-	30,000	*
Steven F. Foster (27)	-	100,000	*
John and Barbara Oppenheimer Family Trust dtd May 28, 1996 (28)	-	60,000	*
Juan S. Utreras and Maria A. Castro (29)	-	60,000	*
Jacqueline W. Barr, GST Exempt Trust (30)	-	60,000	*
Maria Castro (31)	-	26,000	*
Ligia Cortez (32)	-	40,000	*
Armand Pantalone (33)	4,000	40,000	*
Officers and Directors			
Total:		7,019,601	63.97%



\* less than 1%.

Mr. Regazzi has served as the Chief Executive Officer and a Director of the Company since April 2006. Securities (1) to be offered include 200,000 shares of common stock issuable upon conversion Series E Shares and 60,300 shares of common stock issued upon exercise of warrants.

(2) Securities to be offered include 800,000 shares of common stock issuable upon conversion Series E Shares and 603,000 shares of common stock issuable upon exercise of warrants.

Securities to be offered include 950,000 shares of common stock issuable upon conversion Series E Shares and 300,000 shares of common stock issuable upon exercise of warrants. Of this total, Porter Partners, L.P. holds (3) 800,000 shares of common stock and 255,000 shares of common stock issuable upon exercise of warrants and EDJ Limited holds 150,000 shares of common stock and 45,000 shares of common stock issuable upon exercise of warrants.

- (4) Securities to be offered include 30,000 shares of common stock issuable upon conversion Series E Shares.
- (5) Securities to be offered include 100,000 shares of common stock issuable upon conversion Series E Shares and 30,150 shares of common stock issued upon exercise of warrants.
- (6) Securities to be offered include 1,200,000 shares of common stock issuable upon conversion Series E Shares and 301,508 shares of common stock issued upon exercise of warrants.
- (7) Securities to be offered include 500,000 shares of common stock issuable upon conversion Series E Shares and 150,750 shares of common stock issued upon exercise of warrants.
- (8) Securities to be offered include 120,000 shares of common stock issuable upon conversion Series E Shares. Also includes 3,956,456 shares beneficially owned by Alara Capital AVI II, LLC with respect to which Mr. Henckels shares voting and dispositive power as a managing member of Alara Capital AVI II, LLC
- (9) Securities to be offered include 600,000 shares of common stock issuable upon conversion Series E Shares and 180,900 shares of common stock issued upon exercise of warrants.
- (10) Securities to be offered include 100,000 shares of common stock issuable upon conversion Series E Shares and 30,150 shares of common stock issued upon exercise of warrants.
- (11) Securities to be offered include 80,000 shares of common stock issuable upon conversion Series E Shares and 24,120 shares of common stock issued upon exercise of warrants.
- (12) Securities to be offered include 80,000 shares of common stock issuable upon conversion Series E Shares and 48,240 shares of common stock issued upon exercise of warrants.
- (13) Securities to be offered include 100,000 shares of common stock issuable upon conversion of Series E Shares and 30,150 shares of common stock issued upon exercise of warrants.  
Securities to be offered include 580,477 shares of common stock issuable upon exercise of warrants. VFT Special Ventures LTD is a wholly owned subsidiary of Emerging Growth Equities, Ltd, a registered broker-dealer. Emerging Growth Equities, Ltd received these warrants as part of its consideration for serving as placement agent
- (14) in connection with the private placement. Emerging Growth Equities, Ltd did not receive its warrants as compensation for underwriting activities. Of this total, VFT Special Ventures LTD holds 517,954 shares of common stock, and Daniel C. Gardner 31,261 shares of common stock issuable upon exercise of warrants and Cheri Lee Griffiths 31,262 shares of common stock issuable upon exercise of warrants.
- (15) Securities to be offered include 800,000 shares of common stock issuable upon conversion Series E Shares.
- (16) Securities to be offered include 120,000 shares of common stock issuable upon conversion Series E Shares.
- (17) Securities to be offered include 200,000 shares of common stock issuable upon conversion Series E Shares.
- (18) Securities to be offered include 60,000 shares of common stock issuable upon conversion Series E Shares.
- (19) Securities to be offered include 40,000 shares of common stock issuable upon conversion Series E Shares.
- (20) Securities to be offered include 60,000 shares of common stock issuable upon conversion Series E Shares.
- (21) Securities to be offered include 60,000 shares of common stock issuable upon conversion Series E Shares.
- (22) Securities to be offered include 100,000 shares of common stock issuable upon conversion Series E Shares.
- (23) Securities to be offered include 200,000 shares of common stock issuable upon conversion Series E Shares.
- (24) Securities to be offered include 24,000 shares of common stock issuable upon conversion Series E Shares.
- (25) Securities to be offered include 60,000 shares of common stock issuable upon conversion Series E Shares.
- (26) Securities to be offered include 30,000 shares of common stock issuable upon conversion Series E Shares.
- (27) Securities to be offered include 100,000 shares of common stock issuable upon conversion Series E Shares.
- (28) Securities to be offered include 60,000 shares of common stock issuable upon conversion Series E Shares.
- (29) Securities to be offered include 60,000 shares of common stock issuable upon conversion Series E Shares.
- (30) Securities to be offered include 60,000 shares of common stock issuable upon conversion Series E Shares.
- (31) Securities to be offered include 26,000 shares of common stock issuable upon conversion Series E Shares.
- (32) Securities to be offered include 40,000 shares of common stock issuable upon conversion Series E Shares.
- (33) Securities to be offered include 40,000 shares of common stock issuable upon conversion Series E Shares.



## PLAN OF DISTRIBUTION

Up to 11,624,452 shares of common stock are being offered by this prospectus, all of which are being registered for sale for the accounts of the Selling Securityholders. We will not receive any of the proceeds from the sale by the Selling Securityholders of the shares of common stock. If we receive proceeds from the exercise of warrants by Selling Securityholders, we will use the proceeds for working capital purposes. The Company will bear all fees and expenses incident to this registration.

The Selling Securityholders may sell all or a portion of the shares of common stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the Selling Securityholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale (if a public market exists), at varying prices determined at the time of sale, or at negotiated prices. All sales may be effected in transactions, which may involve crosses or block transactions:

on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;

in the over-the-counter market;

in transactions otherwise than on these exchanges or systems or in the over-the-counter market;

through the writing of options, whether such options are listed on an options exchange or otherwise;

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

short sales;

sales pursuant to Rule 144 promulgated under the Securities Act;

broker-dealers may agree with the selling security holders to sell a specified number of such securities at a stipulated price per share;

a combination of any such methods of sale; and

any other method permitted pursuant to applicable law.

If the Selling Securityholders effect such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the Selling Securityholders or commissions from purchasers of the common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of common stock or otherwise, the Selling Securityholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of shares of common stock in the course of hedging in positions they assume. The Selling Securityholders may also sell shares of common stock short and deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed common stock in connection with such short sales. The Selling Securityholders may also loan or pledge common stock to broker-dealers that in turn may sell such shares of common stock.

The Selling Securityholders may pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, amending, if necessary, the list of Selling Securityholders to include the pledgee, transferee or other successors in interest as Selling Securityholders under this prospectus. The Selling Securityholders also may transfer and donate the shares of common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The Selling Securityholders and any broker-dealer participating in the distribution of the shares of common stock may be deemed to be “underwriters” within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of common stock is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of shares of common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the Selling Securityholders and any discounts, commissions or concessions allowed or reallocated or paid to broker-dealers.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such securities have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any Selling Securityholder will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus forms a part.

The Selling Securityholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock by the Selling Securityholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the shares of common stock. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

## **DESCRIPTION OF SECURITIES**

## General

We have 40,000,000 shares of authorized common stock, no par value, of which 10,939,011 (including 250,000 shares of unvested restricted stock) shares were outstanding as of September 28, 2018. We have 1,000,000 shares of authorized preferred stock, of which 250,000 are designated as Series A Junior Participating Preferred Stock (“Series A Preferred Stock”), none of which are outstanding; 10,000 are designated as Series B Convertible Voting Perpetual Preferred Stock, or “Series B Preferred Stock,” of which 9,997 are outstanding; 3,500 shares of Series C Convertible Voting Perpetual Preferred Stock, or “Series C Preferred Stock,” of which 3,424.65 are outstanding, 6,000 shares of Series D Convertible Voting Perpetual Preferred Stock, or Series D Preferred Stock, of which 5,111.86 are outstanding, and 70,000 Series E Shares of which 70,000 are outstanding. Holders of our preferred stock are entitled to vote on an as-converted basis together with holders of our common stock on all matters submitted to a vote of shareholders. As of September 28, 2018, our executive officers and directors held options covering 396,850 shares of common stock which they had not yet exercised and zero shares of unvested restricted stock. We had approximately 10,939,011 shareholders of record of our common stock at September 28, 2018. As of September 28, 2018 we had outstanding warrants to purchase an aggregate 3,450,594 shares of our common stock at prices ranging from \$0.25 per share to \$1.78 per share, with a weighted-average exercise price of \$0.82 per share.

Holders of our common stock are entitled to vote at all elections of directors and to vote or consent on all questions at the rate of one vote for each share. Shareholders may vote cumulatively in the election of directors. Under cumulative voting, every shareholder entitled to vote may give one candidate a number of votes equal to the number of directors to be elected multiplied by the number of shares held or, the shareholder may distribute these votes on the same principle among as many candidates as the shareholder desires.

Subject to the rights, privileges, preferences, restrictions and conditions attaching to any other class or series of shares of the Company, holders of common stock have the right to receive any dividends we declare and pay on our common stock. They also have the right to receive our remaining assets and funds upon liquidation, dissolution or winding-up, if any, after we pay to the holders of any series of preferred stock the amounts they are entitled to, and after we pay all our debts and liabilities.

Our common stock is subject and subordinate to any rights and preferences granted under our Articles of Incorporation and any rights and preferences which may be granted to any series of preferred stock by our board pursuant to the authority conferred upon our board under the Articles of Incorporation.

Subject to the participation rights of our outstanding preferred stock, our board of directors may declare dividends on our common stock out of the surplus or net profits as in their discretion may seem proper. During 2014 and 2015, we did not pay dividends on our common stock. To date, our policy has been to use our capital toward enhancement of our product position rather than paying dividends on our common stock.

The shares of common stock offered by this prospectus and any related prospectus supplement are fully paid and non-assessable and do not have and are not subject to any preemptive or similar rights.

Our common stock is traded on the OTCQB market under the symbol "GIGA".

### **Series A Junior Participating Preferred Stock**

We designated 250,000 shares of Series A Preferred Stock in connection with our adoption of a shareholder rights plan. The shareholder rights plan expired on February 4, 2018 and is no longer in effect. We have not issued any shares of our Series A Preferred stock and the shares remain available for issuance. Shares of Series A Preferred Stock are not be redeemable. Each share of Series A Preferred Stock is generally be entitled to a minimum preferential dividend payment of 100 times the dividend declared per share of common stock. In the event of liquidation, the holders of the shares of Series A Preferred Stock will be entitled to a minimum preferential liquidation payment of



\$100.00 per share but will be entitled to an aggregate payment of 100 times the payment made per share of common stock. Each share of Series A Preferred Stock will have 100 votes, voting together with our common stock. Finally, in the event of any merger, consolidation or other transaction in which shares of our common stock are exchanged, each share of Series A Preferred Stock will be entitled to receive 100 times the amount received per shares of common stock. These rights are protected by customary anti-dilution provisions. Because of the nature of the Series A Preferred Stock's dividend, liquidation and voting rights, the value of the one one-hundredth interest in a share of Series A Preferred Stock purchasable upon exercise of a right should approximate the value of one share of common stock.

### **Series B Preferred Stock**

There are 9,997 shares of our Series B Preferred Stock outstanding. Each share of Series B Preferred Stock is convertible at the option of the holder into 100 shares of our common stock, subject to customary adjustments for stock splits, stock dividends, recapitalizations and similar transactions. Each share of Series B Preferred Stock has a liquidation preference of \$231, which is equal to 105% of the purchase price. If we paid a dividend on our common stock prior to December 31, 2013, we would have been required to pay a dividend on the Series B Preferred Stock equal to 110% and if we pay a dividend on our common stock on or after December 31, 2013, we are required to pay a dividend on the Series B Preferred stock equal to 100% of the cash dividend that would be payable on the number of shares of common stock into which each share of Series B Preferred Stock is then convertible. The Series B Preferred Stock generally votes together with the common stock, the Series C Preferred Stock, the Series D Preferred Stock and the Series E Shares, on an as-converted basis, on each matter submitted to the vote or approval of the holders of common stock, and votes as a separate class with respect to certain actions that adversely affect the rights of the Series B Preferred Stock and on other matters as required by law.

### **Series C Preferred Stock**

There are 3,424.65 shares of our Series C Preferred Stock outstanding. Each share of Series C Preferred Stock is convertible at the option of the holder into 100 shares of our common stock, subject to adjustments for stock splits, stock dividends, recapitalizations and similar transactions. Each share of Series C Preferred Stock has a liquidation preference of approximately \$146. If we paid a dividend on our common stock prior to January 1, 2014 or if we pay a dividend on our common stock on or after January 1, 2014, we are required to pay a dividend on the Series C Preferred Stock equal to 110% or 100%, respectively, of the cash dividend that would be payable on the number of shares of common stock into which each share of Series C Preferred Stock is then convertible. Holders of our Series C Preferred Stock generally votes on an as-converted basis together with holders of our common stock, Series B Preferred Stock, Series D Preferred Stock and Series E Shares on each matter submitted to the vote or approval of the holders of common stock, and would vote as a separate class with respect to certain actions that adversely affect the rights of the Series C Preferred Stock and on other matters as required by law.

### **Series D Preferred Stock**

There are 5,111.86 shares of our Series D Preferred Stock outstanding. Each share of Series D Preferred Stock is convertible at the option of the holder into 100 shares of our common stock subject to customary adjustments for stock splits, stock dividends, recapitalizations and similar transactions. Each share of Series D Preferred Stock has a liquidation preference of \$143.00. If we paid a dividend on our common stock prior to June 1, 2014, we would have been required to pay a dividend on the Series D Preferred Stock equal to 110% and if we pay a dividend on our common stock on or after June 1, 2014, we will be required to pay a dividend on the Series D Preferred Stock equal to 100%, of the cash dividend that would be payable on the shares of common stock into which each share of Series D Preferred Stock is then convertible. Holders of our Series D Preferred Stock generally vote together with holders of our common stock, Series B Preferred Stock, Series C Preferred Stock and the Series E Shares on an as-converted basis, on each matter submitted to the vote or approval of the holders of common stock, and votes as a separate class with respect to certain actions that adversely affect the rights of the Series D Preferred Stock and on other matters as required by law.

### **Series E Preferred Stock**

There are 68,340 Series E Shares outstanding, each of which we sold for price of \$25.00 per share. Each Series E Share is convertible at the option of the holder into 100 shares of our common stock, subject to customary adjustments for stock splits, stock dividends, recapitalizations and similar transactions. Each Series E Share has a liquidation preference of \$37.50. In the event of any liquidation, dissolution or winding up of the affairs of the Company, whether voluntary or involuntary, a merger, or a sale of our Microsource Division or our Giga-tronics RADAR/EW business line or their related assets, before any payment or distribution to holders of junior shares (including our common stock and our Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock), holders of Series E Shares

will be entitled to receive an amount of cash per Series E Share up to the liquidation preference plus all accumulated accrued and unpaid dividends thereon. If a liquidation payment per Series E Share is less than the Series E Shares' liquidation preference, the liquidation preference will be reduced and the Series E Shares' redemption price by the amount of the payment received. If we pay a dividend on our common stock, we are required to pay a dividend on the Series E Shares equal to 100% of the cash dividend that would be payable on the shares of common stock into which each share of Series E Shares is then convertible.

Holders of Series E Shares generally vote together with the holders of our common stock, the Series B Preferred Stock and the Series C Preferred Stock on an as-converted basis, on each matter submitted to the vote or approval of the holders of common stock, and votes as a separate class with respect to certain actions that adversely affect the Series E Preferred Stock. In addition, the approval of the holders of the Series E shares is required prior to the Company's issuance of any securities having rights senior to or in parity with the Series E Shares with respect to dividends or liquidation preferences; provided that we may sell preferred shares ranking on parity with the Series E Shares without such approval if the proceeds are used to repay the Company's indebtedness to Partners For Growth V, L.P. outstanding as of March 28, 2018 (the date the Series E Shares were first issued), including any interest accrued on such indebtedness, provided further that the liquidation preference of such preferred shares does not exceed the price per preferred share. The Series E Shares' right to approve parity securities will terminate at such time that (1) fewer than 22,300 Series E Shares, which is 50% of the number of Series E Shares first issued, remain outstanding or (2) the volume weighted average closing price of the Company's common stock for any 20 trading days within any 30 trading day period is \$0.75 or more, the average daily trading volume over such 30 trading day period is 100,000 shares or more and there is either an effective registration statement covering resale of the shares common stock that holders of Series E Shares would be entitled to receive upon conversion and any shares received as pay-in-kind dividends, or such shares could be freely sold pursuant to Rule 144 under the Securities Act of 1933, as amended.

Holders of Series E Shares are entitled to receive, when, as and if declared by our board of directors, cumulative preferential dividends, payable semiannual in cash at a rate per annum equal to 6.0% of the initial purchase price of \$25.00 per share, provided that the Company may pay dividends in-kind through the issuance of shares of the Company's common stock, based on the 10 day volume weighted average price of the common stock.

### **Remaining Authorized Preferred Stock**

The remaining undesignated shares of preferred stock authorized under our Articles of Incorporation are typically referred to as "blank check" preferred stock. This term refers to stock for which the rights and restrictions are determined by the board of directors of a corporation. Except in limited circumstances, the Company's Articles of Incorporation authorize the Company's board of directors to issue new shares of common stock or preferred stock without further shareholder action. Our Articles of Incorporation give our board of directors the authority at any time to:

divide the remaining authorized but unissued shares of preferred stock into series;

determine the designations, number of shares, relative rights, preferences and limitations of any series of preferred stock;

increase the number of shares of any preferred series; and

decrease the number of shares in a preferred series, but not to a number less than the number of shares outstanding.

The issuance of additional common or preferred stock may be viewed as having adverse effects upon the holders of common stock. Holders of our common stock will not have preemptive rights with respect to any newly issued stock. Our board of directors could adversely affect the voting power of holders of stock in our Company by issuing shares of preferred stock with certain voting, conversion and/or redemption rights. In the event of a proposed merger, tender offer or other attempt to gain control of our Company that the board of directors does not believe to be in the best interests of our shareholders, the board of directors could issue additional preferred stock, which could make any such takeover attempt more difficult to complete. The Company's board of directors does not intend to issue any preferred stock except on terms that the board deems to be in the best interests of the Company and our shareholders.

### ***Transfer Agent and Registrar***

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company LLC, 59 Maiden Lane, Plaza Level, New York, NY 10038.

## **USE OF PROCEEDS**

All securities sold pursuant to this prospectus will be offered and sold by the selling shareholder. We will not receive any of the proceeds from such sales. However, we will generate proceeds in the event of a cash exercise of the warrants by the selling shareholders.

## **LEGAL MATTERS**

The validity of the shares of our common stock offered hereby will be passed upon for us by Sheppard, Mullin, Richter & Hampton LLP, San Francisco, California.

## **EXPERTS**

The financial statements as of and for the year ended March 31, 2018 have been audited by Armanino LLP, an independent registered public accounting firm as set forth in their report and are included in reliance upon such report given as authority of such firm as experts in accounting and auditing. The financial statements as of and for the year ended March 25, 2017 included in this Prospectus have been so included in reliance on the report of Crowe LLP, an independent registered public accounting firm, given on the authority of said firm as experts in accounting and auditing.

## **WHERE YOU CAN FIND MORE INFORMATION**

We have filed with the Securities and Exchange Commission a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information about us and the common stock offered hereby, we refer you to the registration statement and the exhibits and schedules filed thereto. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. A copy of the registration statement and the exhibits and schedules filed therewith may be inspected without charge at the public reference room maintained by the SEC, located at 100 F Street N.E., Washington, D.C. 20549, and copies of all or any part of the registration statement may be obtained from such offices upon the payment of the fees prescribed by the SEC. Please call the SEC at 1-800-SEC-0330 for further information about the public reference room. The SEC also maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The SEC's website address is [www.sec.gov](http://www.sec.gov).

We are subject to the information and periodic reporting requirements of the Exchange Act and, in accordance therewith, we will file periodic reports, proxy statements and other information with the SEC, some of which are incorporated by reference into this prospectus. Such periodic reports, proxy statements and other information will be available for inspection and copying at the public reference room and website of the SEC referred to above.

**INDEX TO FINANCIAL STATEMENTS**

**Giga-tronics Incorporated**

**Unaudited Financial Statements as of and for the Three Months Ended June 30, 2018 and June 24, 2017**

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**Audited Consolidated Financial Statements as of and for the Years Ended March 31, 2018 and March 25, 2017**

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**CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)**

<b>(In thousands except share data)</b>	<b>June 30, 2018</b>	<b>March 31, 2018**</b>
<b>Assets</b>		
Current assets:		
Cash and cash-equivalents	\$748	\$1,485
Trade accounts receivable, net of allowance of \$8 and \$8, respectively	458	364
Inventories, net	3,438	5,487
Prepaid expenses and other current assets	792	87
Total current assets	5,436	7,423
Property and equipment, net	760	833
Other long term assets	175	175
<b>Total assets</b>	<b>\$6,371</b>	<b>\$8,431</b>
<b>Liabilities and shareholders' equity</b>		
Current liabilities:		
Line of credit	\$552	\$552
Accounts payable	756	996
Loan payable, net of discounts and issuance costs	1,523	1447
Accrued payroll and benefits	413	343
Deferred revenue	257	3,374
Deferred rent, net of long term portion	62	58
Capital lease obligations	40	40
Deferred liability related to asset sale	51	52
Other current liabilities	959	947
Total current liabilities	4,613	7,809
Long term deferred rent	411	429
Long term obligations - capital lease	50	62
<b>Total liabilities</b>	<b>5,074</b>	<b>8,300</b>
Commitments and contingencies		
Shareholders' equity:		
Convertible preferred stock no par value Authorized - 1,000,000 shares Series A designated 250,000 shares; no shares at June 30, 2018 and March 31, 2018 issued and outstanding	—	—
Series B, C, D designated 19,500 shares; 18,533.51 shares at June 30, 2018 and March 31, 2018 issued and outstanding; (liquidation preference of \$3,540 at June 30, 2018 and March 31, 2018)	2,911	2,911
Series E designated 60,000 shares; 53,400 shares at June 30, 2018 and 43,800 shares at March 31, 2018 issued and outstanding; (liquidation preference of \$2,003 at June 30, 2018 and \$1,643 at March 31, 2018)	907	702
Common stock no par value; Authorized - 40,000,000 shares; 10,418,953 shares at June 30, 2018 and 10,312,653 shares at March 31, 2018 issued and outstanding	25,272	25,200
Accumulated deficit	(27,793)	(28,682)
<b>Total shareholders' equity</b>	<b>1,297</b>	<b>131</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$6,371</b>	<b>\$8,431</b>

*See Accompanying Notes to Unaudited Condensed Consolidated Financial Statements*



As the Company adopted the requirements of Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers (ASC 606)* as of April 1, 2018, using the modified retrospective method, there is a lack of comparability to the prior periods presented. See Note 1.

\*\* Derived from the audited consolidated financial statements as of and for the fiscal year ended March 31, 2018.

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**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)**

	<b>Three Months Ended</b>	
	<b>June 30,</b>	<b>June 24,</b>
<b>(In thousands except per share data)</b>	<b>2018</b>	<b>2017</b>
<b>Revenue</b>		
Goods	\$207	\$316
Services	2,843	1,675
Total revenue	3,050	1,991
Cost of goods and services	1,744	1,525
<b>Gross margin</b>	1,306	466
Operating expenses:		
Engineering	375	452
Selling, general and administrative	1,001	1,171
Total operating expenses	1,376	1,623
<b>Operating loss</b>	(70 )	(1,157)
Interest expense:		
Interest expense, net	(127 )	(79 )
Interest expense from accretion of loan discount	(50 )	(22 )
Total interest expense, net	(177 )	(101 )
<b>Loss before income taxes</b>	(247 )	(1,258)
Provision for income taxes	40	—
<b>Net loss</b>	\$(287 )	\$(1,258)
<b>Loss per common share - basic</b>	\$(0.03 )	\$(0.13 )
<b>Loss per common share - diluted</b>	\$(0.03 )	\$(0.13 )
<b>Weighted average common shares used in per share calculation:</b>		
Basic	10,419	9,715
Diluted	10,419	9,715

*See Accompanying Notes to Unaudited Condensed Consolidated Financial Statements*

As the Company adopted the requirements of Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers (ASC 606)* as of April 1, 2018, using the modified retrospective method, there is a lack of comparability to the prior periods presented. See Note 1.

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**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)**

	<b>Three Months Ended</b>	
	<b>June 30,</b>	<b>June 24,</b>
<b>(In thousands)</b>	<b>2018</b>	<b>2017</b>
<b>Cash flows from operating activities:</b>		
Net loss	\$(287 )	\$(1,258 )
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	73	247
Stock based compensation	57	46
Estimated equity forward	—	46
Accretion of discounts on debt	50	22
Accrued interest and fees on loan payable	25	—
Change in deferred rent	(14 )	451
Changes in operating assets and liabilities:		
Trade accounts receivable	(94 )	206
Inventories	468	(178 )
Prepaid expenses and other assets	(516 )	75
Accounts payable	(240 )	(441 )
Accrued payroll and benefits	70	(156 )
Deferred revenue	(550 )	(167 )
Other current liabilities	12	—
<b>Net cash used in operating activities</b>	<b>(945 )</b>	<b>(1,107 )</b>
<b>Cash flows from investing activities:</b>		
Purchases of property and equipment	—	(620 )
<b>Net cash used in investing activities</b>	<b>—</b>	<b>(620 )</b>
<b>Cash flows from financing activities:</b>		
Principal payments on capital leases	(12 )	(13 )
Proceeds from borrowings, net of issuance costs	—	1,456
Proceeds from issuance of preferred stock, net of issuance costs	205	—
Exercise of warrants	15	—
<b>Net cash provided by financing activities</b>	<b>208</b>	<b>1,443</b>
<b>Decrease in cash and cash-equivalents</b>	<b>(737 )</b>	<b>(284 )</b>
<b>Beginning cash and cash-equivalents</b>	<b>1,485</b>	<b>1,421</b>
<b>Ending cash and cash-equivalents</b>	<b>\$748</b>	<b>\$1,137</b>
<b>Supplementary disclosure of cash flow information:</b>		
Cash paid for income taxes	\$—	\$—
Cash paid for interest	\$61	\$39

**Supplementary disclosure of noncash activities:**

Cumulative effect of adoption of ASC 606 on inventory	\$(1,581)	—
Cumulative effect of adoption of ASC 606 on prepaid expenses and other current assets	\$189	—
Cumulative effect of adoption of ASC 606 on deferred revenue	\$2,567	—
Common stock issued in connection with debt issuance	\$—	\$156
Fully depreciated equipment disposal	\$—	\$377

*See Accompanying Notes to Unaudited Condensed Consolidated Financial Statements*

As the Company adopted the requirements of Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers (ASC 606)* as of April 1, 2018, using the modified retrospective method, there is a lack of comparability to the prior periods presented. See Note 1.

## NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

### **(1) Organization and Significant Accounting Policies**

The condensed consolidated financial statements included herein have been prepared by Giga-tronics Incorporated (“Giga-tronics” or the “Company”), pursuant to the rules and regulations of the Securities and Exchange Commission. The consolidated results of operations for the interim periods shown in this report are not necessarily indicative of results to be expected for the fiscal year. In the opinion of management, the information contained herein reflects all adjustments (consisting of normal recurring entries) necessary to make the consolidated results of operations for the interim periods a fair statement of such operations. For further information, refer to the consolidated financial statements and footnotes thereto, included in the Annual Report on Form 10-K, filed with the Securities and Exchange Commission for the year ended March 31, 2018.

*Principles of Consolidation* The consolidated financial statements include the accounts of Giga-tronics and its wholly-owned subsidiary, Microsource, Inc. (“Microsource”). All significant intercompany balances and transactions have been eliminated in consolidation

*Derivatives* The Company accounts for certain of its warrants and embedded debt features as derivatives. Changes in fair values are reported in earnings as gain or loss on adjustment of these instruments to fair value.

*Revenue Recognition and Deferred Revenue* Beginning April 1, 2018, the Company follows the provisions of ASU 2014-09 as subsequently amended by the FASB between 2015 and 2017 and collectively known as ASC Topic 606, *Revenue from Contracts with Customers* (“ASC 606”). Amounts for prior periods are not adjusted and continue to be reported in accordance with the Company’s historic accounting practices. The guidance provides a unified model to determine how revenue is recognized. In addition, the standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers.

In determining the appropriate amount of revenue to be recognized as it fulfills its obligations under its agreements, the Company performs the following steps: (i) identifies the promised goods or services in the contract; (ii) determines whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measures the transaction price, including the constraint on variable consideration; (iv) allocates the transaction price to the performance obligations based on estimated selling prices; and (v) recognizes revenue when (or as) the Company satisfies each performance obligation.

The Company generates revenue through the design, manufacture, and sale of products used in defense industry to major prime defense contractors, the armed services (primarily in the U.S.) and research institutes. There is generally one performance obligation in the Company's contracts with its customers. For highly engineered products, the customer typically controls the work in process as evidenced either by contractual termination clauses or by the Company's right to payment for costs incurred to date plus a reasonable profit for products or services that do not have an alternative use. In these circumstances, the performance obligation is the design and manufacturing service. As control transfers continuously over time on these contracts, revenue is recognized based on the extent of progress towards completion of the performance obligation using a cost-to-cost method. Engineering services are also satisfied over time and recognized on the cost-to-cost method. These types of revenue arrangements are typical for our defense contracts within the Microsource segment for its YIG RADAR filter products used in fighter jet aircrafts.

For the sale of standard or minimally customized products, the performance obligation is the series of finished products which are recognized at the points in time the units are transferred to the control of the customer, typically upon shipment. This type of revenue arrangement is typical for our commercial contracts within the Giga-tronics segment for its Advanced Signal Generation and Analysis system products used for testing RADAR and Electronic Warfare ("EW") equipment.

#### *Performance Obligations*

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account in ASC Topic 606. The Company's performance obligations include:

- Design and manufacturing services
- Product supply – Distinct goods or services that are substantially the same
- Engineering services

The majority of the Company's contracts have a single performance obligation as the promise to transfer the individual goods or services is not separately identifiable from other promises in the contracts and, therefore, not distinct. The Company's revenue in fiscal 2019 under ASC 606 primarily relates to design and manufacturing services, there was no product supply, and engineering services were \$56,000.

#### *Transaction Price*

The Company has both fixed and variable consideration. Under the Company's highly engineered design and manufacturing arrangements, advance payments and unit prices are considered fixed, as product is not returnable and the Company has an enforceable right to reimbursement in the event of a cancellation. For standard and minimally customized products, payments can include variable consideration, such as product returns and sales allowances. The transaction price in engineering services arrangements may include estimated amounts of variable consideration, including award fees, incentive fees, or other provisions that can either increase or decrease the transaction price. Milestone payments are identified as variable consideration when determining the transaction price. At the inception of each arrangement that includes milestone payments, the Company evaluates whether the milestones are considered probable of being achieved and estimates the amount to be included in the transaction price using the most likely amount method. The Company estimates variable consideration at the amount to which they expect to be entitled, and determines whether to include estimated amounts as a reduction in the transaction price based largely on an assessment of the conditions that might trigger an adjustment to the transaction price and all information (historical, current and forecasted) that is reasonably available to the Company. The Company includes estimated amounts in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the estimation uncertainty is resolved.

#### *Allocation of Consideration*

As part of the accounting for arrangements that contain multiple performance obligations, the Company must develop assumptions that require judgment to determine the stand-alone selling price of each performance obligation identified in the contract. When a contract contains more than one performance obligation, the Company uses key assumptions to determine the stand-alone selling price of each performance obligation. Because of the customized nature of products and services, estimated stand-alone selling prices for most performance obligations are estimated using a cost-plus margin approach. For non-customized products, list prices generally represent the standalone selling price. The Company allocates the total transaction price to each performance obligation based on the estimated relative stand-alone selling prices of the promised goods or service underlying each performance obligation.

#### *Timing of Recognition*



Significant management judgment is required to determine the level of effort required under an arrangement and the period over which the Company expects to complete its performance obligations under the arrangement. The selection of the method to measure progress towards completion requires judgment and is based on the nature of the products or services to be provided. The Company generally uses the cost-to-cost measure of progress as this measure best depicts the transfer of control to the customer which occurs as we incur costs on our contracts. Under the cost-to-cost method, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. Revenue is recognized for design and manufacturing services and for engineering services over time proportionate to the costs that the Company has incurred to perform the services using the cost-to-cost input method and for products at a point in time. Approximately 99% of the Company's revenue is recognized over time, with the remaining 1% recognized at a point in time.

#### *Changes in Estimates*

The effect of a contract modification on the transaction price and the measure of progress for the performance obligation to which it relates, is recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) on a cumulative catch-up basis.

For contracts using the cost-to-cost method, management reviews the progress and execution of the performance obligations. This process requires management judgment relative to estimating contract revenue and cost, and making assumptions for delivery schedule. This process requires management's judgment to make reasonably dependable cost estimates. Since certain contracts extend over a longer period of time, the impact of revisions in cost and revenue estimates during the progress of work may adjust the current period earnings through a cumulative catch-up basis. This method recognizes, in the current period, the cumulative effect of the changes on current and prior quarters. Contract cost and revenue estimates for significant contracts are generally reviewed and reassessed quarterly. Revenue recognized over time using the cost-to-cost method represented approximately 99% of revenue for the first quarter of 2019.

The aggregate effects of these changes on contracts in the first quarter of 2019 was nominal.

### *Balance Sheet Presentation*

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables (contract assets), and deferred revenue (contract liabilities) on the Condensed Consolidated Balance Sheet. Under the typical payment terms of over time contracts, the customer pays either performance-based payments or progress payments. Amounts billed and due from customers are classified as receivables on the Condensed Consolidated Balance Sheet. Interim payments may be made as work progresses, and for some contracts, an advance payment may be made. A liability is recognized for these interim and advance payments in excess of revenue recognized and is presented as a contract liability which is included within accrued liabilities and other long-term liabilities on the Condensed Consolidated Balance Sheet. Contract liabilities typically are not considered a significant financing component because these cash advances are used to meet working capital demands that can be higher in the early stages of a contract. When revenue recognized exceeds the amount billed to the customer, an unbilled receivable (contract asset) is recorded for the amount the Company is entitled to receive based on its enforceable right to payment.

Remaining performance obligations represent the transaction price of firm orders for which work has not been performed as of the period end date and excludes unexercised contract options and potential orders under ordering-type contracts (e.g., indefinite-delivery, indefinite-quantity).

### *Recognition Prior to April 1, 2018*

Prior to April 1, 2018 under the legacy GAAP, the Company recorded revenue when there was persuasive evidence of an arrangement, delivery had occurred, the price was fixed and determinable, and collectability was reasonably assured. This occurred when products were shipped or the customer accepted title transfer. If the arrangement involved acceptance terms, the Company deferred revenue until product acceptance was received. On certain large development contracts, revenue was recognized upon achievement of substantive milestones. Advanced payments were recorded as deferred revenue until the revenue recognition criteria described above had been met. Amounts for periods ending prior to April 1, 2018 have not been adjusted for ASC 606 and continue to be reported in accordance with the Company's previous accounting practices.

### *New Accounting Standards*

In February 2016, the FASB issued ASU 2016-02 ("ASU 2016-02"), Leases. ASU 2016-02 requires that lessees recognize assets and liabilities for the rights and obligations for leases with a lease term of more than one year. The amendments in this ASU are effective for annual periods ending after December 15, 2018. Early adoption is permitted. The Company is currently evaluating the impact of the adoption of ASU 2016-02 on its consolidated

financial statements.

In May 2014, the FASB issued ASU 2014-09 (“ASC 606”), Revenue from Contracts with Customers. In August 2015 and March, April, May and December 2016, the FASB issued additional amendments to the new revenue guidance relating to reporting revenue on a gross versus net basis, identifying performance obligations, licensing arrangements, collectability, noncash consideration, presentation of sales tax, transition, and clarifying examples. Collectively these are referred to as ASC Topic 606, which replaces all legacy GAAP guidance on revenue recognition and eliminates all industry-specific guidance. ASC 606 establishes a broad principle that would require an entity to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve this principle, an entity identifies the contract with a customer, identifies the separate performance obligations in the contract, determines the transaction price, allocates the transaction price to the separate performance obligations and recognizes revenue when each separate performance obligation is satisfied. ASU ASC 606 was further updated to provide clarification on a number of specific issues as well as requiring additional disclosures. ASC 606 may be applied either retrospectively or through the use of a modified-retrospective method. The full retrospective method requires companies to recast each prior reporting period presented as if the new guidance had always existed. Under the modified retrospective method, companies would recognize the cumulative effect of initially applying the standard as an adjustment to opening retained earnings at the date of initial application. ASC 606 is effective for annual reporting periods beginning after December 15, 2017, and early adoption is permitted beginning in the first quarter of 2017.

The Company adopted ASC 606 on April 1, 2018 (beginning of the Company’s fiscal year) using the modified retrospective method. Under this approach, no restatement of fiscal years 2017 or 2018 was required. Rather, the effect of the adoption was recorded as a cumulative adjustment decreasing the opening balance of accumulated deficit at April 1, 2018.

The most significant change relates to the timing of revenue and cost recognition on the Company’s customer contracts. Under ASC 606, revenue is recognized as the customer obtains control of the goods and services promised in the contract. Given the nature of the Company’s products and terms and conditions in the contracts, the customer typically obtains control as the Company performs work under such contract. Therefore, the Company expects to recognize revenue over time for substantially all of its contracts using the percentage-of-completion cost-to-cost method. As a result, the Company now recognizes revenue for these contracts as it incurs costs, as opposed to when units are delivered. This change has generally resulted in earlier revenue recognition in the performance period as compared to the legacy method for those contracts, giving rise to a decrease to the Company’s opening balance of accumulated deficit as of April 1, 2018.

Adopting ASC 606, Revenue from Contracts with Customers, involves significant new estimates and judgments such as estimating stand-alone selling prices, variable consideration, and total costs to complete the contract. All of the estimates are subject to change during the performance of the contract which may cause more variability due to significant estimates involved in the new accounting.

The cumulative effect of the changes made to the Company's consolidated April 1, 2018 balance sheet for the adoption of Topic 606 were as follows (in thousands):

	<b>Balance at</b>	<b>Topic ASC 606</b>	<b>Balance at</b>
	<b>March 31, 2018</b>	<b>Adjustments</b>	<b>April 1, 2018</b>
<b>Assets</b>			
Prepaid and other current assets	\$87	\$ 188	\$275
Inventories, net	5,487	(1,581 )	3,906
<b>Liabilities</b>			
Deferred revenue	\$3,374	\$ (2,568 )	\$806
<b>Stockholders' Equity</b>			
Accumulated deficit	\$(28,682)	\$ 1,176	\$(27,506)

In accordance with the requirements of Topic 606, the disclosure of the impact of adoption on our condensed consolidated income statement and balance sheet for the first quarter ended June 30, 2018 was as follows (in thousands except for net loss per share):

<b>For the first quarter ended June 30, 2018</b>	<b>Without ASC 606 Adoption</b>	<b>Topic ASC 606 Adjustments</b>	<b>As Reported</b>
<b>Assets</b>			
Prepaid and other current assets	\$ 149	\$ 643	\$ 792
Inventories, net	5,406	(1,968 )	3,438
<b>Liabilities</b>			
Deferred revenue	\$ 2,966	\$ (2,709 )	257
<b>Stockholders' Equity</b>			
Accumulated deficit	\$ (29,177 )	\$ 1,384	(27,793 )
<b>Revenue</b>			
Revenue	\$ 2,247	\$ 596	\$ 2,843
<b>Costs of services</b>			

Costs of services	\$ 416	\$ 358	774
<b>Net loss</b>	\$ (525 )	\$ (238 )	(287 )
Net loss per share, basic and fully diluted	\$ (0.05 )	\$ 0.02	\$ (0.03 )

## **(2) Going Concern and Management's Plan**

The Company incurred net losses of \$287,000 in the first quarter of fiscal 2019 and \$3.1 million in fiscal year 2018. These losses have contributed to an accumulated deficit of \$27.8 million as of June 30, 2018. The Company used cash flow in operations totaling \$945,000 and \$1.1 million in the first quarters of fiscal 2019 and 2018, respectively. The Company has also experienced delays in the development of features, receipt of orders, and shipments for our new EW test system products. These delays have significantly contributed to our continued losses, liquidity concerns and accumulated deficits.

Our EW test system products have shipped to several customers, but potential delays in the refinement of features, longer than anticipated sales cycles, or the ability to efficiently manufacture our EW test system products, could significantly contribute to additional future losses and decreases in working capital.

To help fund operations, the Company relies on advances under the line of credit with Bridge Bank which expires on May 6, 2019. The agreement includes a subjective acceleration clause, which allows for amounts due under the facility to become immediately due in the event of a material adverse change in the Company's business condition (financial or otherwise), operations, properties or prospects, or ability to repay the credit based on the lender's judgement. As of June 30, 2018, the line of credit had an outstanding balance of \$582,000, and additional borrowing capacity of \$143,000.

In April 2017, we entered into a \$1.5 million loan agreement with Partners For Growth, V L.P. (“PFG”) to provide additional cash to fund our operations. As a result of experiencing continued delays in receiving EW test system product orders in fiscal 2018, we were unable to maintain compliance with certain financial covenants required by the PFG loan and, as a result, were subject to a default interest rate between June 2017 and March 2018. On March 26, 2018, and concurrent with the execution of certain stock purchase agreements for the sale of new Series E Convertible Preferred Stock and conditional upon the sale of at least \$1.0 million in gross proceeds thereof, the Company and PFG entered into a modification agreement which provided for the restructuring of certain terms of the PFG loan including resetting of the financial covenants for the remaining loan term (see Note 6, Term Loans, Revolving Line of Credit and Warrants).

In order to raise additional working capital and to restructure the PFG loan, on March 26, 2018, the Company entered into a Securities Purchase Agreement for the sale of 43,800 shares of a newly designated series of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock (“Series E Shares”) to approximately 15 private investors. The purchase price for each Series E Share was \$25.00. Gross proceeds received by the Company were approximately \$1.095 million (the “Placement”). Net proceeds to the Company after fees and expenses of the placement agent were approximately \$1.0 million. Each Series E Share is initially convertible into common stock at the option of the holder at the conversion price of \$0.25 per share, which is equivalent to 100 shares of the Company’s common stock for each Series E Share (see Note 13, Preferred Stock and Warrants – Series E Senior Convertible Voting Perpetual Preferred Stock).

To assist with the upfront purchases of inventory required for future product deliveries, the Company entered into advance payment arrangements with certain customers, whereby the customers reimburse the Company for raw material purchases prior to the shipment of the finished products. The Company will continue to seek similar terms in future agreements with these customers and other customers.

Management will continue to review all aspects of its business including, but not limited to, the contribution of its individual business segments, in an effort to improve cash flow and reduce costs and expenses, while continuing to invest, to the extent possible, in new product development for future revenue streams.

Management will also continue to seek additional working capital and liquidity through debt (including debt refinancing), equity financing or possible product line sales or cessation of unprofitable business product lines, however there are no assurances that such financings or product line sales will be available at all, or on terms acceptable to the Company.

Our historical operating results and forecasting uncertainties indicate that substantial doubt exists related to our ability to continue as a going concern. Management believes that through the actions to date and possible future actions described above, we should have the necessary liquidity to continue operations at least twelve months from the issuance of the financial statements. However, we cannot predict, with certainty, the outcome of our actions to

maintain or generate additional liquidity, including the availability of additional financing, or whether such actions would generate the expected liquidity as currently planned. Forecasting uncertainties also exist with respect to our EW test system product line due to the potential longer than anticipated sales cycles, as well as with potential delays in the refinement of certain features or requisition of certain components and/or our ability to efficiently manufacture it in a timely manner.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern and do not include any adjustments that might result if the Company were unable to do so.

### **(3) Revenue Recognition**

The following table presents changes in the Company's contract assets and liabilities for the three months ended June 30, 2018.

	<b>Balance at</b>			<b>Balance at</b>
	<b>Beginning</b>	<b>Additions</b>	<b>Deductions</b>	<b>the end</b>
	<b>of the Period</b>			<b>of the Period</b>
	(in thousands)			
Contract Assets	\$189	\$ 466	\$ 12	\$ 643
Contract Liabilities: Deferred Revenue	\$(806)	\$ (248 )	\$ 787	\$ 257

During the three months ended June 30, 2018, the Company recognized the following revenues (in thousands).

Revenue recognized in the period from:

Amounts included in contract liabilities at the beginning of the period:

Performance obligations satisfied \$559

New activities in the period:

Changes in estimates (29 )

Performance obligations satisfied 2,313

Total services revenue \$2,843

As of June 30, 2018, the aggregate amount of the transaction price allocated to remaining performance obligations was \$257,000, which the Company expects to recognize into revenue within the next twelve months.

**(4) Inventories**

Inventories consisted of the following:

<b>(In thousands)</b>	<b>June 30,</b>	<b>March 31,</b>
	<b>2018</b>	<b>2018</b>
Raw materials	\$1,147	\$2,290
Work-in-progress	1,749	2,100
Finished goods	81	561
Demonstration inventory	461	536
Total	\$3,438	\$5,487

**(5) Accounts Receivable Line of Credit**

On June 1, 2015 the Company entered into a \$2.5 million Revolving Accounts Receivable Line of Credit agreement with Bridge Bank. The agreement provides for a maximum borrowing capacity of \$2.5 million of which \$2.0 million is subject to a borrowing base calculation and \$500,000 is non-formula based. On May 23, 2017, the Company renewed this credit line (which expired on May 7, 2017) through May 6, 2019.

The loan agreement is secured by all assets of the Company including intellectual property and general intangibles and provides for a borrowing capacity equal to 80% of eligible accounts receivable. The loan matures on May 6, 2019 and bears an interest rate, equal to 1.5% over the bank's prime rate of interest. Interest is payable monthly with principal due upon maturity. The Company paid an annual commitment fee of \$12,500 in May 2017. The loan agreement contains financial and non-financial covenants that are customary for this type of lending and includes a covenant to maintain an asset coverage ratio of at least 150% (defined as unrestricted cash and cash equivalents maintained with Bridge Bank, plus eligible accounts receivable aged less than 90 days from the invoice date, divided by the total amount of outstanding principal of all obligations under the loan agreement).



As of June 30, 2018, the Company was in compliance with all the financial covenants under the agreement. The line of credit requires a lockbox arrangement, which provides for receipts to be swept daily to reduce borrowings outstanding at the discretion of Bridge Bank. This arrangement, combined with the existence of the subjective acceleration clause in the line of credit agreement, necessitates the line of credit be classified as a current liability on the balance sheet. The acceleration clause allows for amounts due under the facility to become immediately due in the event of a material adverse change in the Company's business condition (financial or otherwise), operations, properties or prospects, or ability to repay the credit based on the lender's judgment. As of June 30, 2018, the Company had outstanding borrowings of \$552,000 under the line of credit.

**(6) Term Loans, Revolving Line of Credit and Warrants**

On April 27, 2017, the Company entered into a \$1,500,000 loan agreement with Partners For Growth V, L.P. ("PFG"), which was funded by PFG on April 28, 2017 (the "2017 Loan"). The 2017 Loan, which matures on April 27, 2019, provides for interest only payments during the term of the loan with principal and any accrued interest and fees due upon maturity. The 2017 Loan bears interest at a fixed aggregate per annum rate equal to 16% per annum, of which 9.5% per annum rate is payable monthly in cash and 6.5% per annum rate is accrued monthly and due upon maturity. In addition, the Company agreed to pay PFG a cash fee of up to \$100,000 payable upon maturity (the "back-end fee"), \$76,000 of which was earned on April 27, 2017, and \$24,000 of which is earned at the rate of \$1,000 per month on the first day of each month if the loan principal (or any amount thereof) is outstanding during any day of the prior month.

Additionally, the 2017 Loan provides for the Company's issuance of up to 250,000 common shares to PFG, of which 190,000 was earned by PFG upon signing (April 27, 2017) and 60,000 of which is earned at the rate of 2,500 per month on the first day of each month if the loan principal (or any amount thereof) is outstanding during any day of the prior month. The 2017 Loan provided for certain financial covenants related to the revenue achievement and maintenance of tangible net worth. PFG can accelerate the maturity of the loan in case of a default and the Company can prepay the loan before maturity without interest prepayments or penalty. The Company has pledged all of its assets as collateral for the 2017 Loan, including all its accounts, inventory, equipment, deposit accounts, intellectual property and all other personal property. The 2017 Loan is subordinate to the Bridge Bank line of credit (see Note 5, Accounts Receivable Line of Credit).

The requirement to issue 60,000 shares of the Company's common stock over the term of the loan is an embedded derivative (an embedded equity forward). The Company evaluated the embedded derivative in accordance with ASC 815-15-25. The embedded derivative is not clearly and closely related to the debt host instrument and therefore is being separately measured at fair value, with subsequent changes in fair value being recognized in the consolidated statements of operations.

The proceeds received upon issuing the loan were allocated to: i) common stock, for the fair value of the 190,000 shares of common stock initially issued to the lender; ii) the fair value of the embedded derivative; and iii) the loan host instrument. Upon issuance of the loan, the Company recognized \$1,576,000 of principal payable to PFG, representing the stated principal balance of \$1,500,000 plus the initial back-end fee of \$76,000. The initial carrying value of the loan was recognized net of debt discount aggregating approximately \$326,000, which is comprised of the following:

Fees paid to the lender and third parties	\$44,000
Back-end fee	76,000
Estimated fair value of embedded equity forward	49,000
Fair value of 190,000 shares of common stock issued to lender	157,000
Aggregate discount amount	\$326,000

The bifurcated embedded derivative and the debt discount are presented net with the related loan balance in the consolidated balance sheets. The debt discount is being amortized to interest expense over the loan's term using the effective interest method. During the fiscal year ended March 31, 2018, the Company amortized discounts of approximately \$127,000 to interest expense. As of June 30, 2018, the Company had issued to PFG 375,000 common shares under the loans.

PFG's ability to call the debt on default (contingent put) and its ability to assess interest rate at a default rate (contingent interest) are embedded derivatives, which the Company evaluated. The fair value of these embedded features was determined to be immaterial and was not bifurcated from the debt host for accounting purposes.

Between June 24, 2017 and March 25, 2018, the Company was not in compliance with the loan's revenue and tangible net worth financial covenants and was subject to a default interest rate of 22% per annum which it accrued and paid when due during this period.

On March 26, 2018, concurrent with the execution of the Securities Purchase Agreement for the Series E Shares (see Note 13 – Preferred Stock and Warrants - Series E Senior Convertible Voting Perpetual Preferred Stock), the Company

and PFG entered into a modification agreement providing for the restructuring of certain terms associated with approximately \$1.7 million in indebtedness under the 2017 Loan. Subject to the sale of at least \$1.0 million in Series E Shares, PFG agreed to waive all current defaults and cease applying the applicable default interest rate, returning to the stated non-default rate of 16%, and to lower the revenue and tangible net worth covenants for the remaining term of the loan. As consideration for the modifications, the Company reduced the exercise price of outstanding warrants previously granted to PFG pursuant to the 2014 Loan Agreement and Credit Line to purchase 260,000 shares of the Company's common stock from \$1.42 to \$0.25 per share and extended the exercisability of the warrants by one year to March 13, 2020.

The amendments to the 2017 Loan were recognized as a loan modification. The change in fair value of the warrants of \$43,700, resulting from the reduced strike price and extension of term, was recognized as a discount to the 2017 Loan and is being amortized to interest expense over the remaining term of the 2017 Loan.

The Company anticipates it will need to seek additional funds through the issuance of new debt, equity securities or product line sales in order to repay the 2017 Loan (including accrued interest and back end fees) in full upon maturity or otherwise enter into a refinancing agreement with PFG. However, there can be no assurances that such financings, re-financing or product line sales will be available at all, or on terms acceptable to the Company.

**(7) Fair Value**

Pursuant to the accounting guidance for fair value measurement and its subsequent updates, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants at the measurement date. The accounting guidance establishes a hierarchy for inputs used in measuring fair value that minimizes the use of unobservable inputs by requiring the use of observable market data when available. Observable inputs are inputs that market participants would use in pricing the asset or liability based on active market data. Unobservable inputs are inputs that reflect the assumptions market participants would use in pricing the asset or liability based on the best information available in the circumstances.

The fair value hierarchy is broken down into the three input levels summarized below:

- *Level 1* —Valuations are based on quoted prices in active markets for identical assets or liabilities and readily accessible by us at the reporting date. Examples of assets and liabilities utilizing Level 1 inputs are certain money market funds, U.S. Treasuries and trading securities with quoted prices on active markets.
- *Level 2* —Valuations based on inputs other than the quoted prices in active markets that are observable either directly or indirectly in active markets. Examples of assets and liabilities utilizing Level 2 inputs are U.S. government agency bonds, corporate bonds, commercial paper, certificates of deposit and over-the-counter derivatives.
- *Level 3* —Valuations based on unobservable inputs in which there are little or no market data, which require us to develop our own assumptions.

The carrying amounts of the Company's cash and cash-equivalents and line of credit approximate their fair values at each balance sheet date due to the short-term maturity of these financial instruments, and generally result in inputs categorized as Level 1 within the fair value hierarchy. The carrying value of the outstanding PFG loan approximates the estimated aggregate fair value and classified with the loan host. The fair value estimate of the embedded equity forward is based on the closing price of the Company's common stock on the measurement date, the risk-free rate, the date of expiration, and any expected cash distributions of the underlying asset before expiration. The estimated fair value of the embedded equity forward represents a Level 2 measurement.

On March 26, 2018, the Company and PFG agreed to eliminate the cash put provision contained in warrants in exchange for the Company issuing 150,000 shares of the Company's common stock. Upon removal of the put, the warrants were re-valued using the Black-Scholes option-pricing model with the following assumptions: (i) remaining term of 0.96 years, (ii) expected volatility of 85%, (iii) risk-free interest rate of 2.12%, and (iv) no expected dividends. The resulting change in fair value of the warrants, along with the fair value of the common stock issued to PFG, was recognized as an adjustment of warrant liability in the consolidated statements of operations.

There were no assets measured at fair value on a recurring basis and there were no assets or liabilities measured on a non-recurring basis at June 30, 2018 and March 31, 2018.

**(8) Loss Per Share**

Basic loss per share (EPS) is calculated by dividing net income or loss by the weighted average common shares outstanding during the period. Diluted EPS reflects the net incremental shares that would be issued if unvested restricted shares became vested and dilutive outstanding stock options were exercised, using the treasury stock method. In the case of a net loss, it is assumed that no incremental shares would be issued because they would be antidilutive. In addition, certain options are considered antidilutive because assumed proceeds from exercise price, related tax benefits and average future compensation was greater than the weighted average number of options outstanding multiplied by the average market price during the period. Shares excluded from the diluted EPS calculation because they would be anti-dilutive are as follows:

<b>(In thousands)</b>	<b>Three Months Ended</b>	
	<b>June 30,</b>	<b>June 24,</b>
	<b>2018</b>	<b>2017</b>
(in thousands):		
Common shares issuable upon exercise of stock options	1,498	1,104
Restricted stock awards	262	350
Issuable shares for interest on loan	25	60
Common shares issuable upon conversion of convertible preferred stock	7,113	1,853
Common shares issuable upon exercise of warrants	3,960	3,737

The stock options, restricted stock, convertible preferred stocks and warrants not included in the computation of diluted earnings per share (EPS) for the three month period ended June 30, 2018 and June 24, 2017 is a result of the Company's net loss and, therefore, the effect of these instruments would be anti-dilutive.

**(9) Stock Based Compensation**

The Company has established the 2005 Equity Incentive Plan, which provide for the granting of options and restricted stock for up to 2,850,000 shares of common stock at 100% of fair market value at the date of grant, with each grant requiring approval by the Board of Directors of the Company. The 2005 Plan has been extended to be effective until 2025. Option grants under the 2000 Stock Option Plan are no longer available. Options granted generally vest in one or more installments in a four or five year period and must be exercised while the grantee is employed by the Company or within a certain period after termination of employment or service arrangement. Options granted to employees shall not have terms in excess of 10 years from the grant date. Holders of options may be granted stock appreciation rights (SARs), which entitle them to surrender outstanding awards for a cash distribution under certain changes in ownership of the Company, as defined in the stock option plan. As of June 30, 2018, no SAR's have been granted under the option plan. As of June 30, 2018, the total number of shares of common stock available for issuance was 437,677. All outstanding options have a ten year life from the date of grant. The Company records compensation cost associated with share-based compensation equivalent to the estimated fair value of the awards over the requisite service period.

**Stock Options**

In calculating compensation related to stock option grants, the fair value of each stock option was estimated on the date of grant using the Black-Scholes-Merton option-pricing model and the following weighted average assumptions:

	<b>Three Months Ended</b>	
	<b>June 30, 2018</b>	<b>June 24, 2017</b>
Dividend yield	—	—
Expected volatility	92.55 %	—
Risk-free interest rate	2.82 %	—
Expected term (years)	8.36	—

The computation of expected volatility used in the Black-Scholes-Merton option-pricing model is based on the historical volatility of the Company's share price. The expected term is estimated based on a review of historical employee exercise behavior with respect to option grants. The risk-free interest rate is based on the U.S. Treasury rates with maturity similar to the expected term of the option on the date of grant.

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A summary of the changes in stock options outstanding for the three-month period ended June 30, 2018 and the year ended March 31, 2018 is as follows:

	Shares	Weighted Average Exercise Price per share	Weighted Average Remaining Contractual Terms (Years)	Aggregate Intrinsic Value
Outstanding at March 25, 2017	1,104,500	\$ 1.41	6.1	\$ 3
Granted	856,000	0.34	10.0	
Forfeited / Expired	(481,800 )	1.34		
Outstanding at March 31, 2018	1,478,700	\$ 0.56	8.0	\$ —
Granted	50,000	0.27	10.0	
Forfeited / Expired	(31,000 )	1.41		
Outstanding at June 30, 2018	1,497,700	\$ 0.53	7.8	\$ —
Exercisable at June 30, 2018	500,650	\$ 0.79	4.4	\$ —
At June 30, 2018 expected to vest in the future	702,491	\$ 0.40	9.6	\$ —

As of June 30, 2018, there was \$205,000 of total unrecognized compensation cost related to non-vested options. That cost is expected to be recognized over a weighted average period of 3.71 years and will be adjusted for subsequent changes in estimated forfeitures. There were 7,200 options that vested during the quarter ended June 30, 2018, and 26,500 options that vested during the quarter ended June 24, 2017. The total fair value of options vested during each of the quarters ended June 30, 2018 and June 24, 2017 was \$9,052 and \$33,000 respectively. There were no options exercised in the three-month period ended June 30, 2018 and June 24, 2017. Share based compensation cost related to stock options recognized in operating results for the three months ended June 30, 2018 and June 24, 2017 totaled \$20,000 and \$37,000, respectively.

Restricted Stock

The Company granted no restricted awards (“RSAs”) during the first quarter of fiscal 2019. No RSAs were granted during the first quarter of fiscal 2018. The RSAs are considered fixed awards as the number of shares and fair value at the grant date is amortized over the requisite service period net of estimated forfeitures. As of June 30, 2018, there was \$61,000 of total unrecognized compensation cost related to non-vested RSAs. That cost is expected to be recognized over a weighted average period of 0.87 years and will be adjusted for subsequent changes in estimated forfeitures. Compensation cost recognized for RSAs and unrestricted stock awards in operating results for the three months ended June 30, 2018 and June 24, 2017 totaled \$37,000 and \$9,000, respectively

A summary of the changes in non-vested RSAs outstanding for the three-month period ended June 30, 2018 and the fiscal year ended March 31, 2018 is as follows:

	Shares	Weighted Average Fair Value
Non-Vested at March 25, 2017	—	\$ —
Granted	586,950	0.66
Vested	(51,000 )	(0.60 )
Forfeited or cancelled	(236,000)	(0.68 )
Non-Vested at March 31, 2018	299,950	\$ 0.65
Vested	(37,500 )	(0.39 )
Non-Vested at June 30, 2018	262,450	\$ 0.68

**(10) Significant Customer and Industry Segment Information**

The Company has two reportable segments: Giga-tronics Division and Microsource.

The Giga-tronics Division historically produced a broad line of test and measurement equipment used primarily for the design, production, repair and maintenance of products in aerospace, telecommunications, RADAR, and



electronic warfare. The Company completed the divestiture of its switch and legacy product lines, and is now solely focused on producing the ASG and the ASA.

Microsource primarily develops and manufactures YIG RADAR filters used in fighter jet aircraft for two prime contractors.

The tables below present information for the two reportable segments:

(In thousands)	Three Month Periods			Three Month Periods		
	Ended At June 30 ,		Net Income  (Loss)	Ended At June 24,		Net Income  (Loss)
	2018	2018		2017	2017	
	Assets	Net Sales		Assets	Net Sales	
Giga-tronics Division	\$4,418	\$38	\$ (1559 )	\$6,153	\$297	\$ (1,849 )
Microsource	1,953	1,061	1,272	2,907	1,694	591
Total	\$6,371	\$1,099	\$ (287 )	\$9,060	\$1,991	\$ (1,258 )

During the first quarter of fiscal 2019, one customer accounted for 64% of the Company's consolidated revenues and was included in the Microsource segment. A second customer accounted for 31% and was also included in the Microsource segment. During the first quarter of fiscal 2018, one customer accounted for 43% of the Company's consolidated revenues and was included in the Microsource segment. A second customer accounted for 37% and was also included in the Microsource segment.

## (11) Income Taxes

The Company accounts for income taxes using the asset and liability method as codified in Topic 740. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry-forwards.

The Company recorded \$62,000 income tax expense for the three months ended June 30, 2018 and no income tax expense for the three months ended June 24, 2017. In April 2018, the Franchise Tax Board (“FTB”) issued its response to the Appeal filed by the Company to dispute the original audit findings related an ongoing audit. As a result of this development, the accrued state tax liability was increased by \$62,000, from \$45,000 to \$107,000. The effective tax rate for the three months ended June 30, 2018 and June 24, 2017 was 0% each year, primarily due to a valuation allowance recorded against the net deferred tax asset balance.

As of June 30, 2018, the Company had recorded \$122,000 for unrecognized tax benefits related to uncertain tax positions. The unrecognized tax benefit is netted against the non-current deferred tax asset on the Consolidated Balance Sheet. The Company does not expect the liability for unrecognized tax benefits to change materially within the next 12 months.

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (the “Act”), which significantly changed U.S. tax law. The Act lowered the Company’s U.S. statutory federal income tax rate from 35% to 21% effective January 1, 2018, and imposes new limitations on the utilization of losses incurred in tax years beginning after December 31, 2017. However, the enactment of the legislative changes has not affected the Company’s overall effective tax rate of 0%, due to, as previously noted, a full valuation allowance recorded against the net deferred tax asset balance.

## **(12) Warranty Obligations**

The Company records a liability in cost of sales for estimated warranty obligations at the date products are sold. Adjustments are made as new information becomes available. The following provides a reconciliation of changes in the Company’s warranty reserve. The Company provides no other guarantees.

	<b>Three Months Ended June 30, 2018</b>	<b>Three Months Ended June 24, 2017</b>
<b>(In thousands)</b>		
Balance at beginning of period	\$ 164	\$ 123
Provision, net	6	1
Warranty costs incurred	(29 )	(33 )
Balance at end of period	\$ 141	\$ 91

## **(13) Preferred Stock and Warrants**

### **Series E Senior Convertible Voting Perpetual Preferred Stock**

On March 26, 2018, the Company entered into a Securities Purchase Agreement for the sale of 43,800 shares of a newly designated series of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock (“Series E Shares”) to approximately 15 private investors. The sale was completed and the Series E Shares were issued on March 28, 2018.

The purchase price for each Series E Share was \$25.00. Gross proceeds received by the Company were approximately \$1.095 million (the “Placement”). Net proceeds to the Company after fees and expenses of the Placement were approximately \$1.0 million. Placement agent fees incurred in connection with the transaction were 5% of gross proceeds or approximately \$57,000 in cash, plus warrants to purchase 5% of the number of common shares into which the Series E shares can be converted (223,000 shares) at an exercise price of \$0.25 per share.

Each Series E Share is initially convertible (at the option of the holder) at a conversion price of \$0.25 per share of common stock, representing 100 shares of the Company’s common stock per each Series E Share. The conversion ratio is subject to adjustments for stock splits, stock dividends, recapitalizations and similar transactions. As of March 31, 2018, if all 43,800 issued Series E Shares were immediately converted, holders of such shares would acquire 4,380,000 shares of common stock of the Company, or 31% of the pro forma number of shares of common stock that would be outstanding if the conversion had occurred on this date, 27% of the pro forma number of shares of common stock that would be outstanding upon the conversion of the Company’s outstanding shares of Series B, Series C and Series D Convertible Preferred Stock (collectively, the “Previously Issued Preferred Shares”) and 22% of the pro forma number of shares of common stock that would be outstanding if all shares of preferred stock were converted and all warrants exercised as of this date. The Company is entitled to redeem Series E Shares at a price equal to 300% of the Series E Share purchase price, or \$75.00 per share, subject to potential adjustment, but the right to redeem is subject to satisfaction of certain conditions related to the market price and trading volume of the Company’s common stock.

Each Series E Share has a liquidation preference of 150% of the purchase price or \$37.50, subject to adjustment. In the event of any liquidation, dissolution or winding up of the affairs of the Company, whether voluntary or involuntary, a merger, or a sale of the Company’s MSI business line or Simulation and Electronics Warfare business line or their related assets, before any payment or distribution to holders of junior shares (including common stock and Previously Issued Preferred Stock), holders of Series E Shares will be entitled to receive an amount of cash per share of Series E Shares up to the liquidation preference plus all accumulated accrued and unpaid dividends thereon. Upon a sale of the Company’s MSI business line or Simulation and Electronics Warfare business line or their related assets, holders of Series E Shares shall be entitled to receive a pro rata portion of the net sale proceeds after reasonable transaction expenses and amount payable to the Company’s secured creditors for releases of their liens on such assets, up to the liquidation preference plus accrued and unpaid dividends. If the payment per Series E Shares is less than the Series E Shares’ liquidation preference, the liquidation preference and the Series E Share redemption price will be reduced by the amount of the payment received.

Holder of Series E Shares are entitled to receive, when, as and if declared by the Company's Board of Directors, cumulative preferential dividends, payable semiannual in cash at a rate per annum equal to 6.0% of the initial purchase price of \$25.00 per share or in-kind (at the Company's election) through the issuance of shares of the Company's common stock, based on the 10 day volume weighted average price of the common stock.

Holder of Series E Shares generally vote together with the common stock on an as-converted basis on each matter submitted to the vote or approval of the holders of common stock, and vote as a separate class with respect to certain actions that adversely affect the rights of the holders of Series E Shares and on other matters as required by law. In addition, the approval of the Holders of the Series E shares is generally required prior to the Company's issuance of any securities having rights senior to or in parity with the Series E Shares with respect to dividends or liquidation preferences. The Series E Shares' right to approve parity securities will terminate at such time that (1) fewer than 22,300 Series E Shares, which is 50% of the number of Series E Shares first issued, remain outstanding or (2) the volume weighted average closing price of the Company's common stock for any 20 trading days within any 30 trading day period is \$0.75 or more, the average daily trading volume over such 30 trading day period is 100,000 shares or more and there is either an effective registration statement covering resale of the shares of common stock that holders of Series E Shares would be entitled to receive upon conversion and any shares received as pay-in-kind dividends, or such share could be freely sold pursuant to Rule 144 under the Securities Act of 1933, as amended.

The Company and each Series E investor entered into an Investor Rights Agreement. Under this agreement, the Company agreed to, among other things, use best efforts to file certain registration statements for the resale of common stock of the Company that the investor may acquire upon conversion of the Series E Shares and may potentially receive as payment-in-kind dividends during the two years following the date of the agreement. The Company also agreed that it would not issue additional debt without the approval by holders of at least 66.6% of the Series E Shares, other than trade debt incurred in the normal course and commercial bank working capital debt, whether revolving or term debt. Concurrent with the execution of the Securities Purchase Agreement for the Series E Shares, the Company and PFG entered into a modification agreement providing for the restructuring of certain terms associated with approximately \$1.7 million in indebtedness owed to PFG (see Note 8 – Term Loans, Revolving Line of Credit and Warrants).

In connection with the sale of Series E Shares, the Company agreed to reduce the exercise price of certain warrants issued in connection with the Company's private placement in January 2016 (see Note 18 – Private Placement Offering), in which the Company sold (in part) 2,787,872 warrants (a "2016 Warrant"). Each 2016 Warrant entitled the holder to purchase 0.75 shares of the Company's common stock at the price of \$1.15 per whole share. The Company agreed to reduce the exercise price of 2016 Warrants that are held by the 2016 Investors purchasing Series E Shares from \$1.15 to \$0.25 per share as follows: A 2016 Investor purchasing an amount equal to or exceeding the lesser of \$200,000 or 50% of the amount it invested in the 2016 Private Placement will have the exercise price of all of its 2016 Warrants reduced to \$0.25, and 2016 Investors purchasing less than the lesser of \$200,000 or 50% of the amount it invested in the January 2016 Private Placement will have the exercise price of a ratable percentage of the 2016 Warrants reduced to \$0.25. In connection with its sale of the Series E Shares, the Company reduced the exercise price of 1,759,268 of the outstanding 2016 Warrants to \$0.25.

The fair value attributable to re-pricing the 2016 Warrants, provided to the participating 2016 Investors, of approximately \$203,000, was deducted from the Series E gross proceeds to arrive at the initial discounted carrying value of the Series E Shares. The initial discounted carrying value resulted in recognition of a beneficial conversion feature of approximately \$557,000, further reducing the initial carrying value of the Series E Shares. The discount to the aggregate stated value of the Series E Shares, resulting from recognition of the beneficial conversion feature, was immediately accreted as a reduction of common stock and an increase in the carrying value of the Series E Shares. The accretion is presented as a deemed dividend in the consolidated statements of operations.

In addition, warrants to purchase 292,727 shares of common stock held by the placement agent, as a result of a prior transaction, were amended to reduce the exercise price from \$1.15 per share to \$0.25 per share. The fair value attributable to re-pricing the placement agent warrants of approximately \$53,000 was recognized as additional Series E issuance costs and recognized net in the carrying value of Series E Shares.

For the three months ending June 30, 2018, the Company issued an additional 8,800 shares of Series E Senior Convertible Voting Perpetual Preferred Stock at a purchase price of \$25.00 per share for total gross proceeds of \$220,000.

The table below presents information as of June 30, 2018 and March 31, 2018:

**Preferred Stock**

	Shares	Shares	Shares	Liquidation
	Designated	Issued	Outstanding	Preference (in thousands)
Series B	10,000.00	9,997.00	9,997.00	\$ 2,309
Series C	3,500.00	3,424.65	3,424.65	500
Series D	6,000.00	5,111.86	5,111.86	731
Series E	60,000.00	43,800.00	43,800.00	1,643
Total at March 31, 2018	79,500.00	62,333.51	62,333.51	\$ 5,183
Series E		9,600.00	9,600.00	360
Total at June 30, 2018	79,500.00	71,933.51	71,933.51	\$ 5,413

**(14) — Subsequent Events**

During August 2018, the Company issued an additional 1,400 shares of Series E Senior Convertible Voting Perpetual Preferred Stock at a purchase of \$25.00 per share for total gross proceeds of \$35,000.

**GIGA-TRONICS INCORPORATED**  
**CONSOLIDATED BALANCE SHEETS**

(In thousands except share data)

	<b>March 31, 2018</b>	<b>March 25, 2017</b>
<b>Assets</b>		
Current assets:		
Cash and cash-equivalents	\$1,485	\$1,421
Trade accounts receivable, net of allowance of \$8 and \$45, respectively	364	954
Inventories, net	5,487	4,811
Prepaid expenses and other current assets	87	452
Total current assets	7,423	7,638
Property and equipment, net	833	528
Other long term assets	175	175
Capitalized software development costs, net	—	733
<b>Total assets</b>	<b>\$8,431</b>	<b>\$9,074</b>
<b>Liabilities and shareholders' equity</b>		
Current liabilities:		
Line of credit	\$552	\$582
Loan payable, net of discounts and issuance costs	1,447	—
Accounts payable	996	1,107
Accrued payroll and benefits	343	583
Deferred revenue	3,374	3,614
Deferred rent	58	—
Capital lease obligations	52	50
Deferred liability related to asset sale	40	375
Other current liabilities	947	707
Total current liabilities	7,809	7,018
Warrant liability, at estimated fair value	—	222
Long term deferred rent	429	—
Long term obligations - capital lease	62	114
<b>Total liabilities</b>	<b>8,300</b>	<b>7,354</b>
Commitments and contingencies		
Shareholders' equity:		
Convertible preferred stock of no par value; Authorized - 1,000,000 shares		
Series A - designated 250,000 shares; no shares at March 31, 2018 and March 25, 2017 issued and outstanding	—	—
Series B, C, D- designated 19,500 shares; 18,533.51 shares at March 31, 2018 and March 25, 2017 issued and outstanding; (liquidation preference of \$3,540 at March 31, 2018 and March 25, 2017)	2,911	2,911
Series E- designated 60,000 shares; 43,800 shares at March 31, 2018 issued and outstanding; (liquidation preference of \$1,643 at March 31, 2018)	702	—
Common stock of no par value; Authorized - 40,000,000 shares; 10,312,653 shares at March 31, 2018 and 9,594,203 at March 25, 2017 issued and outstanding	25,200	24,390



Accumulated deficit	(28,682)	(25,581)
<b>Total shareholders' equity</b>	131	1,720
<b>Total liabilities and shareholders' equity</b>	\$8,431	\$9,074

*See Accompanying Notes to Consolidated Financial Statements*

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**GIGA-TRONICS INCORPORATED****CONSOLIDATED STATEMENTS OF OPERATIONS****(In thousands except per share data)**

	<b>Years Ended</b>	
	<b>March</b>	<b>March</b>
	<b>31,</b>	<b>25,</b>
	<b>2018</b>	<b>2017</b>
<b>Net sales</b>	\$9,800	16,267
Cost of sales	7,064	11,716
<b>Gross profit</b>	2,736	4,551
Operating expenses:		
Engineering	1,794	2,254
Selling, general and administrative	4,076	4,641
Total operating expenses	5,870	6,895
<b>Operating loss</b>	(3,134)	(2,344)
Gain on adjustment of warrant liability to fair value	172	131
Gain on sale of product line	324	802
Interest expense:		
Interest expense, net	(461 )	(111 )
Interest expense from accretion of loan discount	-	(22 )
Total interest expense, net	(461 )	(133 )
<b>Loss before income taxes</b>	(3,099)	(1,544)
Provision for income taxes	2	2
<b>Net loss</b>	\$(3,101)	\$(1,546)
Deemed dividend on Series E shares	(557 )	—
<b>Net loss attributable to common shareholders</b>	\$(3,658)	\$(1,546)
<b>Loss per common share – basic</b>	\$(0.38 )	\$(0.16 )
<b>Loss per common share – diluted</b>	\$(0.38 )	\$(0.16 )
<b>Weighted average common shares used in per share calculation:</b>		
Basic	9,738	9,550
Diluted	9,738	9,550

*See Accompanying Notes to Consolidated Financial Statements*

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**GIGA-TRONICS INCORPORATED****CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY****(In thousands except share data)**

	Preferred Stock		Common Stock		Accumulated	
	Shares	Amount	Shares	Amount	Deficit	Total
<b>Balance at March 26, 2016</b>	18,534	\$ 2,911	9,549,703	\$24,104	\$ (24,035 )	\$2,980
Net loss					(1,546 )	(1,546)
Restricted stock granted			44,500	—		
Share based compensation				286		286
<b>Balance at March 25, 2017</b>	18,534	2,911	9,594,203	24,390	(25,581 )	1,720
Net loss					(3,101 )	(3,101)
Restricted stock granted			586,950	—		
Restricted stock forfeited			(236,000 )			
Share based compensation				251		251
Shares issued related to loan agreement			367,500	224		224
Proceeds from issuance of Series E preferred stock, net of issuance costs of \$102	43,800	993				993
Repriced 2016 investor warrants		(203 )		203		—
Fair value of the warrants issued to EGE as issuance cost of Series E		(54 )		54		—
Repricing of warrants issued to EGE related to 2016 private placement		(34 )		34		—
Fair value of modified PFG warrants				44		44
Beneficial Conversion Feature (BCF) upon issuance of Series E preferred shares		(557 )		557		—
Deemed dividend of discount to Series E preferred shares resulting from recognition of BCF		557		(557 )		—
<b>Balance at March 31, 2018</b>	62,334	\$ 3,613	10,312,653	25,200	\$ (28,682 )	\$ 131

*See Accompanying Notes to Consolidated Financial Statements*

**GIGA-TRONICS INCORPORATED****CONSOLIDATED STATEMENTS OF CASH FLOWS****(In thousands)**

	<b>March 31, 2018</b>	<b>March 25, 2017</b>
<b>Cash flows from operating activities:</b>		
Net loss	\$(3,101)	\$(1,546)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,116	827
Share based compensation	251	286
Accretion of discounts and issuance costs on debt	127	30
Adjustment of warrant liability to fair value	(172 )	(131 )
Change in fair value of equity forward	(16 )	—
Capitalized software development costs	—	(334 )
Change in other long term assets	—	(167 )
Gain on sale of product line	(324 )	(802 )
Accrued interest and fees on loan payable	98	—
Change in deferred rent	487	(110 )
Changes in operating assets and liabilities:		
Trade accounts receivable	590	1,175
Inventories	(676 )	883
Prepaid expenses and other current assets	365	(134 )
Accounts payable	(111 )	(817 )
Accrued payroll and benefits	(240 )	(64 )
Deferred revenue	(240 )	810
Other current liabilities	229	38
<b>Net cash used in operating activities</b>	<b>(1,617)</b>	<b>(56 )</b>
<b>Cash flows from investing activities:</b>		
Purchases of property and equipment	(688 )	(41 )
Cash received from sale of product line	—	1,225
Cash returned related to sale of product line	—	(375 )
<b>Net cash (used in) provided by investing activities</b>	<b>(688 )</b>	<b>809</b>
<b>Cash flows from financing activities:</b>		
Payments on capital leases	(50 )	(45 )
Repayments of line of credit	(30 )	(218 )
Proceeds from loan payable, net of issuance costs	1,456	—

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Repayments of loan payable	—	(400 )
Proceeds from issuance of Series E preferred stock, net of issuance costs of \$102	993	—
<b>Net cash (used in) provided by financing activities</b>	<b>2,369</b>	<b>(663 )</b>
<b>Increase in cash and cash-equivalents</b>	<b>64</b>	<b>90</b>
<b>Beginning cash and cash-equivalents</b>	<b>1,421</b>	<b>1,331</b>
<b>Ending cash and cash-equivalents</b>	<b>\$1,485</b>	<b>\$1,421</b>
<b>Supplementary disclosure of cash flow information:</b>		
Cash paid for income taxes	\$2	\$2
Cash paid for interest	\$282	\$77
<b>Supplementary disclosure of noncash investing and financing activities:</b>		
Fair value of warrants issued to EGE as issuance costs for Series E	\$54	\$—
Fair value of modified warrants	\$281	\$—
Common stock issued in connection with debt issuance	\$224	\$—
Fully depreciated equipment disposal	\$380	\$174

*See Accompanying Notes to Consolidated Financial Statements*

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

### **1 Summary of Significant Accounting Policies**

The accompanying consolidated financial statements include the accounts of Giga-tronics Incorporated (“Giga-tronics”) and its wholly-owned subsidiary, Microsource Incorporated (“Microsource”), collectively the “Company”. The Company’s corporate office and manufacturing facilities are located in Dublin, California.

Microsource develops and manufactures a broad line of YIG (Yttrium, Iron, Garnet) tuned oscillators, filters and microwave synthesizers, which are used by its customers in operational applications and in manufacturing a wide variety of microwave instruments and devices. Microsource’s two largest customers are prime contractors for which it develops and manufactures YIG RADAR filters used in fighter jet aircraft.

The Giga-tronics Division designs, manufactures and markets a family of modular test products for use primarily in the electronic warfare (EW) segment of the defense electronics market. These modular test products are used for the construction of test and emulation systems used to validate the performance of EW equipment. Giga-tronics Division customers include major prime defense contractors, the armed services (primarily in the U.S) and research institutes. This product platform for EW test & simulation applications (formerly referred to as “Hydra”) has been the Company’s principal new product development initiative since 2011 within the test & measurement equipment marketplace, replacing its broad product line of general purpose benchtop test & measurement products used for the design, production, repair and maintenance of products in the aerospace and telecommunications equipment marketplace. The substantial majority of these legacy product lines which the Company produced over the previous 35 years were sold by the Company between 2013 and 2016 in order to fund, in part, the Company’s operations and to develop the EW test product platform. For example, we sold our SCPM product line to Teradyne in 2013; in December 2015, we sold our Power Meters and Amplifiers to Spanawave Corporation; and in June 2016, we sold our Switch product line to Astronics (see Note 10, Sale of Product Lines). The Company believes the EW test and simulation product market possesses greater long-term opportunities for revenue growth and improved gross margins compared to the general purpose test & measurement equipment marketplace.

*Principles of Consolidation* The consolidated financial statements include the accounts of Giga-tronics and its wholly-owned subsidiary. All significant intercompany balances and transactions have been eliminated in consolidation.

*Use of Estimates* The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ

from those estimates.

*Fiscal Year* The Company's financial reporting year consists of either a 52 week or 53 week period ending on the last Saturday of the month of March. Fiscal year 2018 ended on March 31, 2018 resulting in a 53 week year. Fiscal year 2017 ended on March 25, 2017, which resulted in a 52 week year. All references to years in the consolidated financial statements relate to fiscal years rather than calendar years.

*Revenue Recognition and Deferred Revenue* The Company records revenue when there is persuasive evidence of an arrangement, delivery has occurred, the price is fixed and determinable, and collectability is reasonably assured. This occurs when products are shipped or the customer accepts title transfer. If the arrangement involves acceptance terms, the Company defers revenue until product acceptance is received. On certain large development contracts, revenue is recognized upon achievement of substantive milestones. Determining whether a milestone is substantive is a matter of judgment and that assessment is performed only at the inception of the arrangement. The consideration earned from the achievement of a milestone must meet all of the following for the milestone to be considered substantive:

- a. It is commensurate with either of the following:
  1. The Company's performance to achieve the milestone.
  2. The enhancement of the value of the delivered item or items as a result of a specific outcome resulting from the Company's performance to achieve the milestone.
- b. It relates solely to past performance.
- c. It is reasonable relative to all of the deliverables and payment terms (including other potential milestone consideration) within the arrangement.



Milestones for revenue recognition are agreed upon with the customer prior to the start of the contract and some milestones are based on product shipping while others are based on design review. In fiscal 2015 the Company's Microsource business unit received a \$6.5 million order from a major aerospace company for non-recurring engineering services to develop a variant of its high performance fast tuning YIG filters for an aircraft platform and to deliver a limited number of flight-qualified prototype hardware units (the "NRE Order") which is being accounted for on a milestone basis. The Company considered factors such as estimated completion dates and product acceptance of the order prior to accounting for the NRE Order as milestone revenue. During the fiscal years ended March 31, 2018 and March 25, 2017, revenue recognized on a milestone basis were zero and \$478,000, respectively.

On certain contracts with several of the Company's significant customers the Company receives payments in advance of manufacturing. Advanced payments are recorded as deferred revenue until the revenue recognition criteria described above has been met.

Accounts receivable are stated at their net realizable value. The Company has estimated an allowance for uncollectable accounts based on analysis of specifically identified accounts, outstanding receivables, consideration of the age of those receivables, the Company's historical collection experience, and adjustments for other factors management believes are necessary based on perceived credit risk.

The activity in the allowance account for doubtful accounts is as follows for the years ended:

	<b>March 31,</b>	<b>March 25,</b>
(Dollars in thousands)	<b>2018</b>	<b>2017</b>
Beginning balance	\$ 45	\$ 45
Provisions for doubtful accounts	(37 )	—
Write-off of doubtful accounts	—	—
Ending balance	\$ 8	\$ 45

*Accrued Warranty* The Company's warranty policy generally provides one to three years of coverage depending on the product. The Company records a liability for estimated warranty obligations at the date products are sold. The estimated cost of warranty coverage is based on the Company's actual historical experience with its current products or similar products. For new products, the required reserve is based on historical experience of similar products until such time as sufficient historical data has been collected on the new product. Adjustments are made as new information becomes available.

*Inventories* Inventories are stated at the lower of cost or fair value using full absorption and standard costing. Cost is determined on a first-in, first-out basis. Standard costing and overhead allocation rates are reviewed by management periodically, but not less than annually. Overhead rates are recorded to inventory based on capacity management expects for the period the inventory will be held. Reserves are recorded within cost of sales for impaired or obsolete inventory when the cost of inventory exceeds its estimated fair value. Management evaluates the need for inventory reserves based on its estimate of the amount realizable through projected sales including an evaluation of whether a product is reaching the end of its life cycle. When inventory is discarded it is written off against the inventory reserve, as inventory generally has already been fully reserved for at the time it is discarded.

*Research and Development* Research and development expenditures, which include the cost of materials consumed in research and development activities, salaries, wages and other costs of personnel engaged in research and development, costs of services performed by others for research and development on the Company's behalf and indirect costs are expensed as operating expenses when incurred. Research and development costs totaled approximately \$1.8 million and \$2.3 million for the years ended March 25, 2018 and March 26, 2017, respectively.

*Property and Equipment* Property and equipment are stated at cost. Depreciation is calculated using the straight-line method over the estimated useful lives of the respective assets, which range from three to ten years for machinery and equipment and office fixtures. Leasehold improvements and assets acquired under capital leases are amortized using the straight-line method over the shorter of the estimated useful lives of the respective assets or the lease term.

The Company reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If such review indicates that the carrying amount of an asset exceeds the sum of its expected future cash flows on an undiscounted basis, the asset's carrying amount would be written down to fair value. Additionally, the Company reports long-lived assets to be disposed of at the lower of carrying amount or fair value less cost to sell. As of March 31, 2018, and March 25, 2017, management believes there has been no impairment of the Company's long-lived assets.

*Warrants to Purchase Common Stock* Warrants are accounted for in accordance with the applicable accounting guidance provided in ASC 815 - *Derivatives and Hedging* as either derivative liabilities or as equity instruments depending on the specific terms of the agreements. Liability-classified instruments are recorded at fair value at each reporting period with any change in fair value recognized as a component of change in fair value of derivative liabilities in the consolidated statements of operations. The Company estimates liability-classified instruments using either a Monte Carlo simulation or the Black Scholes option-pricing model, depending on the nature of the warrant's terms. The valuation methodologies require management to develop assumptions and inputs that have significant impact on such valuations. The Company periodically evaluates changes in facts and circumstances that could impact the classification of warrants from liability to equity, or vice versa.

On March 26, 2018, the Company and holders of the Company's liability-classified warrants, Partners For Growth, V L.P. ("PFG"), agreed to eliminate the \$217,000 cash "put" provision contained in warrants in exchange for the Company issuing 150,000 shares of the Company's common stock. Upon removal of the put, the warrants were re-valued using the Black-Scholes option-pricing model prior to being reclassified to equity. The resulting change in fair value of the warrants, along with the fair value of the common stock of approximately of \$50,000 issued to PFG, was recognized as gain on adjustment of warrant liability in the consolidated statements of operations.

*Embedded Derivatives* Embedded derivatives must be separately measured from the host contract if all the requirements for bifurcation are met. The assessment of the conditions surrounding the bifurcation of embedded derivatives depends on the nature of the host contract. Bifurcated embedded derivatives are recognized at fair value, with changes in fair value recognized in the statement of operations each period. Bifurcated embedded derivatives are classified with the related host contract in the Company's consolidated balance sheets.

*Deferred Rent* Rent expense is recognized in an amount equal to the guaranteed base rent plus contractual future minimum rental increases amortized on the straight-line basis over the terms of the leases, including free rent periods.

*Income Taxes* Income taxes are accounted for using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Future tax benefits are subject to a valuation allowance when management is unable to conclude that its deferred tax assets will more likely than not be realized. The ultimate realization of deferred tax assets is dependent upon generation of future taxable income during the periods in which those temporary differences become deductible. Management considers both positive and negative evidence and tax planning strategies in making this assessment.

The Company considers all tax positions recognized in its financial statements for the likelihood of realization. When tax returns are filed, it is highly certain that some positions taken would be sustained upon examination by the taxing authorities, while others are subject to uncertainty about the merits of the positions taken or the amounts of the positions that would be ultimately sustained. The benefit of a tax position is recognized in the financial statements in the period during which, based on all available evidence, management believes it is more likely than not that the position will be sustained upon examination, including the resolution of appeals or litigation processes, if any. Tax positions that meet the more-likely-than-not recognition threshold are measured as the largest amount of tax benefit that is more than 50 percent likely of being realized upon settlement with the applicable taxing authority. The portion of the benefits associated with tax positions taken that exceeds the amount measured as described above, if any, would be reflected as unrecognized tax benefits, as applicable, in the accompanying consolidated balance sheets along with any associated interest and penalties that would be payable to the taxing authorities upon examination. The Company recognizes accrued interest and penalties, if any, related to unrecognized tax benefits as a component of the provision for income taxes in the consolidated statements of operations.

*Product Development Costs* The Company incurs pre-production costs on certain long-term supply arrangements. The costs, which represent non-recurring engineering and tooling costs, are capitalized as other assets and amortized over their useful life when reimbursable by the customer. All other product development costs are charged to operations as incurred. Capitalized pre-production costs included in inventory were immaterial as of March 31, 2018 and March 25, 2017.

*Software Development Costs* Development costs included in the research and development of new software products and enhancements to existing software products are expensed as incurred, until technological feasibility in the form of a working model has been established. Capitalized development costs are amortized over the expected life of the product and evaluated each reporting period for impairment.

*Discontinued Operations* The Company reviews its reporting and presentation requirements for discontinued operations as it moves to newer technology within the test and measurement market from legacy products to the newly developed Advanced Signal Generator. The disposal of these product line sales represents an evolution of the Company's Giga-tronics Division to a more sophisticated product offered to the same customer base. The Company has evaluated the sales of product lines (see Note 10, Sale of Product Lines) concluding that each product line does not meet the definition of a "component of an entity" as defined by ASC 205-20. The Company is able to distinguish revenue and gross margin information as disclosed in Note 10, Sale of Product Lines to the accompanying financial statements; however, operations and cash flow information is not clearly distinguishable and the company is unable to present meaningful information about results of operations and cash flows from those product lines.

*Share-based Compensation* The Company records share-based compensation expense for the fair value of all stock options and restricted stock that are ultimately expected to vest as the requisite service is rendered. In fiscal 2018, the Company provided a special grant of nonqualified options to purchase 400,000 shares of common stock at the price of \$0.33 per share based on reliance on the exemption afforded by Section 4(2) of the Securities Act. One fourth of the option vests on the first anniversary of the grant date and 1/48 of the option vests on each of the 36 months thereafter.

The cash flows resulting from the tax benefits resulting from tax deductions in excess of the compensation cost recognized for those options (excess tax benefits) are classified as cash flows from financing in the statements of cash flows. These excess tax benefits were not significant for the Company for the fiscal years ended March 31, 2018 or March 25, 2017.

In calculating compensation related to stock option grants, the fair value of each stock option is estimated on the date of grant using the Black-Scholes-Merton option-pricing model. The computation of expected volatility used in the Black-Scholes-Merton option-pricing model is based on the historical volatility of Giga-tronics' share price. The expected term is estimated based on a review of historical employee exercise behavior with respect to option grants. The risk free interest rate for the expected term of the option is based on the U.S. Treasury yield curve in effect at the time of the grant. Expected dividend yield was not considered in the option pricing formula since the Company has not paid dividends and has no current plans to do so in the future.

The fair value of restricted stock awards is based on the fair value of the underlying shares at the date of the grant. Management makes estimates regarding pre-vesting forfeitures that will impact timing of compensation expense recognized for stock option and restricted stock awards.

*Earnings or Loss Per Common Share* Basic earnings or loss per common share is computed using the weighted average number of common shares outstanding during the period. Diluted earnings per share incorporate the incremental shares issuable upon the assumed exercise of stock options and warrants using the treasury stock method. Anti-dilutive options are not included in the computation of diluted earnings per share. Non-vested shares of restricted stock have non-forfeitable dividend rights and are considered participating securities for the purpose of calculating

basic and diluted earnings per share under the two-class method.

*Comprehensive Income or Loss* There are no items of comprehensive income or loss other than net income or loss.

*Financial Instruments and Concentration of Credit Risk* Financial instruments that potentially subject the Company to credit risk consist of cash, cash-equivalents and trade accounts receivable. The Company's cash-equivalents consist of overnight deposits with federally insured financial institutions. Concentration of credit risk in trade accounts receivable results primarily from sales to major customers. The Company individually evaluates the creditworthiness of its customers and generally does not require collateral or other security. At March 31, 2018, one customer accounted for 79% of consolidated gross accounts receivable. At March 25, 2017, three customers combined accounted for 67% of consolidated gross accounts receivable.

*Fair Value of Financial Instruments and Fair Value Measurements* The Company's financial instruments consist principally of cash and cash-equivalents, line of credit, term debt, and warrant derivative liability. The fair value of a financial instrument is the amount at which the instrument could be exchanged in an orderly transaction between market participants to sell the asset or transfer the liability. The Company uses fair value measurements based on quoted prices (unadjusted) for identical assets or liabilities in active markets that the entity can access as of the measurement date (Level 1), significant other observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data (Level 2), or significant unobservable inputs reflect a company's own assumptions about the assumptions that market participants would use in pricing an asset or liability (Level 3), depending on the nature of the item being valued.

*Recently Issued Accounting Standards*

In April 2015, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) ASU 2015-03, “Interest - Imputation of Interest (Subtopic 835-30) – *Simplifying the Presentation of Debt Issuance Costs*,” or ASU 2015-03. ASU 2015-03 simplifies the presentation of debt issuance costs by requiring that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct reduction from the carrying amount of that debt liability, consistent with debt discounts. The recognition and measurement guidance for debt issuance costs are not affected by this ASU. The amendments in this ASU are effective for financial statements issued for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years. The adoption of this ASU by the Company changed the presentation of certain debt issuance costs, which are reported as a direct offset to the applicable debt on the balance sheet.

In November 2015, the FASB issued ASU 2015-17 – *Income Taxes (Topic 740): “Balance Sheet Classification of Deferred Taxes”*. Topic 740 is effective for public business entities for financial statements issued for annual periods beginning after December 15, 2016, and interim periods within those annual periods. For all other entities, the amendments are effective for financial statements issued for annual periods beginning after December 15, 2017, and interim periods within annual periods beginning after December 15, 2018. The amendments may be applied prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. The amendments in ASU 2015-17 eliminates the current requirement for organizations to present deferred tax liabilities and assets as current and noncurrent in a classified balance sheet. Instead, organizations will be required to classify all deferred tax assets and liabilities as noncurrent. The Company is currently evaluating the impact this accounting standard update may have on its financial statements.

In February 2016, the FASB issued ASU 2016-02 (“ASU 2016-02”), Leases. ASU 2016-02 requires that lessees recognize assets and liabilities for the rights and obligations for leases with a lease term of more than one year. The amendments in this ASU are effective for annual periods ending after December 15, 2018. Early adoption is permitted. The Company is currently evaluating the impact of the adoption of ASU 2016-02 on its consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09 (“ASU 2014-09”), Revenue from Contracts with Customers. ASU 2014-09 establishes a broad principle that would require an entity to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve this principle, an entity identifies the contract with a customer, identifies the separate performance obligations in the contract, determines the transaction price, allocates the transaction price to the separate performance obligations and recognizes revenue when each separate performance obligation is satisfied. ASU 2014-09 was further updated to provide clarification on a number of specific issues as well as requiring additional disclosures. ASU 2014-09 may be applied either retrospectively or through the use of a modified-retrospective method. The full retrospective method requires companies to recast each prior reporting period presented as if the new guidance had always existed. Under the modified retrospective method, companies would recognize the cumulative effect of initially applying the standard as an adjustment to opening retained earnings at the

date of initial application. ASU 2014-09 is effective for annual reporting periods beginning after December 15, 2017, and early adoption is permitted beginning in the first quarter of 2017.

The Company adopted ASU 2014-09 on April 1, 2018 (beginning of the Company's fiscal year) using the modified retrospective method. Under this approach, no restatement of fiscal years 2017 or 2018 was required. Rather, the effect of the adoption was recorded as a cumulative adjustment to the opening balance of retained earnings at April 1, 2018.

While the Company is still in the process of finalizing the impact of adoption of the new standard on its financial statements, the Company has identified that the most significant change relates to the timing of its revenue recognition on its customer contracts.

Under the legacy GAAP, the Company recorded revenue when there was persuasive evidence of an arrangement, delivery had occurred, the price was fixed and determinable, and collectability was reasonably assured. This occurred when products were shipped or the customer accepted title transfer. If the arrangement involved acceptance terms, the Company deferred revenue until product acceptance was received. On certain large development contracts, revenue was recognized upon achievement of substantive milestones. Advanced payments were recorded as deferred revenue until the revenue recognition criteria described above had been met.

Under ASU 2014-09, revenue is recognized as the customer obtains control of the goods and services promised in the contract. Given the nature of the Company's products and terms and conditions in the contracts, the customer typically obtains control as the Company performs work under such contract. Therefore, the Company expects to recognize revenue over time for substantially all of its contracts using the percentage-of-completion cost-to-cost method. As a result, the Company anticipates recognizing revenue for these contracts as it incurs costs, as opposed to when units are delivered. This change has generally resulted in earlier revenue recognition in the performance period as compared to the legacy method for those contracts, giving rise to an increase to the Company's opening balance of retained earnings as of April 1, 2018.



Adopting ASU No. 2014-09, Revenue from Contracts with Customers, involves significant new estimates and judgments such as estimating stand-alone selling prices, variable consideration, and total costs to complete the contract. All of the estimates are subject to change during the performance of the contract which may cause more variability due to significant estimates involved in the new accounting.

## **2 Going Concern and Management's Plan**

The Company incurred net losses of \$3.1 million and \$1.5 million in the fiscal years ended March 31, 2018 and March 25, 2017, respectively. These losses have contributed to an accumulated deficit of \$28.7 million as of March 31, 2018. The Company has also experienced delays in the development of features, orders, and shipments for the new EW test system products. These delays have significantly contributed to a decrease in working capital (deficit) from \$620,000 on March 25, 2017, to (\$386,000) on March 31, 2018.

The new EW test system products have now shipped to several customers, but potential delays in the refinement of features, longer than anticipated sales cycles, or the ability to efficiently manufacture our EW test system products, could significantly contribute to additional future losses and decreases in working capital.

To help fund operations, the Company relies on advances under the line of credit with Bridge Bank. The line of credit which expired on May 7, 2017, was renewed through May 6, 2019. The credit agreement includes a subjective acceleration clause, which allows for amounts due under the facility to become immediately due in the event of a material adverse change in the Company's business condition (financial or otherwise), operations, properties or prospects, or ability to repay the credit based on the lender's judgement. As of March 31, 2018, the line of credit had a balance of \$552,000, and additional borrowing capacity of \$77,000, respectively.

During April 2017, we entered into a \$1.5 million loan agreement with Partners For Growth, V L.P. ("PFG") to provide additional cash to fund our operations. As a result of experiencing continued delays in receiving EW test system product orders in fiscal 2018, we were unable to maintain compliance with certain financial covenants required by the PFG loan and, as a result, were subject to a default interest rate between June 2017 and March 2018. On March 26, 2018, and concurrent with the execution of certain stock purchase agreements for the sale of new Series E Convertible Preferred Stock and conditional upon the sale of at least \$1.0 million in gross proceeds thereof, the Company and PFG entered into a modification agreement which provided for the restructuring of certain terms of the PFG loan including resetting of the financial covenants for the remaining loan term (see Note 8, Term Loans, Revolving Line of Credit and Warrants).

In order to raise additional working capital and to restructure the PFG loan, on March 26, 2018, the Company entered into a Securities Purchase Agreement for the sale of 43,800 shares of a newly designated series of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock ("Series E Shares") to approximately 15 private investors. The

purchase price for each Series E Share was \$25.00. Gross proceeds received by the Company were approximately \$1.095 million (the "Placement"). Net proceeds to the Company after fees and expenses of the Placement was approximately \$1.0 million. Each Series E Share is initially convertible at the option of the holder at the purchase price of \$0.25 per share of common stock, which is 100 shares of the Company's common stock per each Series E Share (see Note 19, Private Preferred Stock and Warrants – Series E Senior Convertible Voting Perpetual Preferred Stock).

To assist with the upfront purchases of inventory required for future product deliveries, the Company entered into advance payment arrangements with certain customers, whereby the customers reimburse the Company for raw material purchases prior to the shipment of the finished products. The Company will continue to seek similar terms in future agreements with these customers and other customers.

Management will continue to review all aspects of its business including, but not limited to, the contribution of its individual business segments, in an effort to improve cash flow and reduce costs and expenses, while continuing to invest, to the extent possible, in new product development for future revenue streams.

Management will also continue to seek additional working capital and liquidity through debt (including debt refinancing), equity financing or possible product line sales or cessation of unprofitable business product lines, however there are no assurances that such financings or product line sales will be available at all, or on terms acceptable to the Company.

Our historical operating results and forecasting uncertainties indicate that substantial doubt exists related to our ability to continue as a going concern. Management believes that through the actions to date and possible future actions described above, we should have the necessary liquidity to continue operations at least twelve months from the issuance of the financial statements. However, we cannot predict, with certainty, the outcome of our actions to maintain or generate additional liquidity, including the availability of additional financing, or whether such actions would generate the expected liquidity as currently planned. Forecasting uncertainties also exist with respect to our EW test system product line due to the potential longer than anticipated sales cycles, as well as with potential delays in the refinement of certain features, and/or our ability to efficiently manufacture it in a timely manner.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern and do not include any adjustments that might result if the Company were unable to do so.

### **3 Cash and Cash-Equivalents**

Cash and cash-equivalents of \$1.5 million and \$1.4 million at March 31, 2018 and March 25, 2017, respectively, consisted of demand deposits with a financial institution that is a member of the Federal Deposit Insurance Corporation (FDIC). At March 31, 2018, \$1.2 million of the Company's demand deposits exceeded FDIC insurance limits.

### **4 Inventories**

Inventories consisted of the following:

	<b>March 31, 2018</b>	<b>March 25, 2017</b>
(Dollars in thousands)		
Raw materials	\$2,290	\$1,775
Work-in-progress	2,100	2,155
Finished goods	561	473
Demonstration inventory	536	408
Total	\$5,487	\$4,811

### **5 Property, Plant and Equipment, net**

Property, plant and equipment, net is comprised of the following:

	<b>March 31, 2018</b>	<b>March 25, 2017</b>
(Dollars in thousands)		
Leasehold improvements	\$633	327
Machinery and equipment	4,333	4,330
Computer and software	681	678
Furniture and office equipment	227	231
Subtotal	5,874	5,566
Less: accumulated depreciation and amortization	(5,041)	(5,038)
Total	\$833	\$528

### **6 Software Development Costs**

On September 3, 2015, the Company entered into a software development agreement with a major aerospace and defense company whereby the aerospace company developed and licensed its simulation software to the Company. The simulation software (also called Open Loop Simulator or OLS technology) is currently the aerospace company's intellectual property. The OLS technology generates threat simulations and enables various hardware to generate signals for performing threat analysis on systems under test. The Company licenses the OLS software as a bundled or integrated solution with its Advanced Signal Generator system.

The Company paid the aerospace company software development costs and fees for OLS of \$1.2 million in the aggregate (this includes an amendment to the software development agreement for additional features and functionality), which was paid in monthly installments as the work was performed by the aerospace company through the third quarter of fiscal 2017. The OLS technology is a perpetual license agreement that may be terminated by the Company at any time as long as the Company provides a notice to the aerospace company and pays for the development costs incurred through the notice termination date. The Company is also obligated to pay royalties to the aerospace company on net sales of its Advanced Signal Generator product sold with the OLS software equal to seven percent of net sales price of each ASG system sold and subject to certain minimums. The Company expenses research and development costs as they are incurred. Development costs of computer software to be sold, leased, or otherwise marketed are subject to capitalization beginning when a product's technological feasibility has been established and ending when a product is available for general release to customers.

As of March 31, 2018, and March 25, 2017, capitalized software costs were zero and \$733,000, respectively. The Company began amortizing the costs of capitalized software to cost of sales in fiscal 2017 using the percentage of revenue approach. During the fourth quarter of fiscal 2017, the Company revised its estimates in accounting for the amortization of the capitalized software costs due to the long procurement cycle associated with the product. The Company had previously elected to amortize the capitalized software costs on a straight-line basis over a three year period, however, the Company revised its estimates based on the percentage of revenue associated with the current period revenues. This change in estimate and remaining amortization increased the Company's cost of sales by \$733,000 in fiscal 2018.

## **7**Accounts Receivable Line of Credit

On June 1, 2015, the Company entered into a \$2.5 million Revolving Accounts Receivable Line of Credit agreement with Bridge Bank. The agreement provides for a maximum borrowing capacity of \$2.5 million of which \$2.0 million is subject to a borrowing base calculation and \$500,000 is non-formula based. On May 23, 2017, the Company renewed this credit line (which expired on May 7, 2017) through May 6, 2019.

The loan agreement is secured by all assets of the Company including intellectual property and general intangibles and provides for a borrowing capacity equal to 80% of eligible accounts receivable. The loan matures on May 6, 2019 and bears an interest rate equal to 1.5% over the bank's prime rate of interest (which was 4.50% at March 31, 2018 resulting in an interest rate of 6.0%). Interest is payable monthly with principal due upon maturity. The Company paid an annual commitment fee of \$12,500 in May 2017. The loan agreement contains financial and non-financial covenants that are customary for this type of lending and includes a covenant to maintain an asset coverage ratio of at least 150% (defined as unrestricted cash and cash equivalents maintained with Bridge Bank, plus eligible accounts receivable aged less than 90 days from the invoice date, divided by the total amount of outstanding principal of all obligations under the loan agreement). While the Company maintained the asset coverage ratio, the Company was in a cross default during the period in which it was in non-compliance with its loan with PFG (see Note 8 below).

The line of credit requires a lockbox arrangement, which provides for receipts to be swept daily to reduce borrowings outstanding at the discretion of Bridge Bank. This arrangement, combined with the existence of the subjective acceleration clause in the line of credit agreement, necessitates the line of credit be classified as a current liability on the balance sheet. The acceleration clause allows for amounts due under the facility to become immediately due in the event of a material adverse change in the Company's business condition (financial or otherwise), operations, properties or prospects, or ability to repay the credit based on the lender's judgment. As of March 31, 2018, the line of credit had a balance of \$552,000, and additional borrowing capacity of \$77,000, respectively.

## **8**Term Loans, Revolving Line of Credit and Warrants

### **2017 Loan Agreement**

On April 27, 2017, the Company entered into a \$1,500,000 loan agreement with Partners For Growth V, L.P. (“PFG”), which was funded by PFG on April 28, 2017 (the “2017 Loan”). The 2017 Loan, which matures on April 27, 2019, provides for interest only payments during the term of the loan with principal and any accrued interest and fees due upon maturity. The 2017 Loan bears interest at a fixed aggregate per annum rate equal to 16% per annum, of which 9.5% per annum rate is payable monthly in cash and 6.5% per annum rate is accrued monthly and due upon maturity. In addition, the Company agreed to pay PFG a cash fee of up to \$100,000 payable upon maturity (the “back-end fee”), \$76,000 of which was earned on April 27, 2017, and \$24,000 of which is earned at the rate of \$1,000 per month on the first day of each month if the loan principal (or any amount thereof) is outstanding during any day of the prior month. If the Company meets or exceeds certain revenue and net income minimums in fiscal 2018, the amount could be reduced by 25 percent.

Additionally, the 2017 Loan provides for the Company’s issuance of up to 250,000 common shares to PFG, of which 190,000 was earned by PFG upon signing (April 27, 2017) and 60,000 of which is earned at the rate of 2,500 per month on the first day of each month if the loan principal (or any amount thereof) is outstanding during any day of the prior month. The 2017 Loan provided for certain financial covenants related to the revenue achievement and maintenance of tangible net worth. PFG can accelerate the maturity of the loan in case of a default and the Company can prepay the loan before maturity without interest prepayments or penalty. The Company has pledged all of its assets as collateral for the 2017 Loan, including all its accounts, inventory, equipment, deposit accounts, intellectual property and all other personal property. The 2017 Loan is subordinate to the Bridge Bank line of credit (see Note 7, Accounts Receivable Line of Credit).

The requirement to issue 60,000 shares of the Company's common stock over the term of the loan is an embedded derivative (an embedded equity forward). The Company evaluated the embedded derivative in accordance with ASC 815-15-25. The embedded derivative is not clearly and closely related to the debt host instrument and therefore has been separately measured at fair value, with subsequent changes in fair value recognized in the consolidated statements of operations.

The proceeds received upon issuing the loan was allocated to: i) common stock, for the fair value of the 190,000 shares of common stock initially issued to the lender; ii) the fair value of the embedded derivative; and iii) the loan host instrument. Upon issuance of the loan, the Company recognized \$1,576,000 of principal payable to PFG, representing the stated principal balance of \$1,500,000 plus the initial back-end fee of \$76,000. The initial carrying value of the loan was recognized net of debt discount aggregating approximately \$326,000, which is comprised of the following:

Fees paid to the lender and third parties	\$44,000
Back-end fee	76,000
Estimated fair value of embedded equity forward	49,000
Fair value of 190,000 shares of common stock issued to lender	157,000
Aggregate discount amount	\$326,000

The bifurcated embedded derivative and the debt discount are presented net with the related loan balance in the consolidated balance sheets. The debt discount is amortized to interest expense over the loan's term using the effective interest method. During the fiscal year ended March 31, 2018, the Company amortized discounts of approximately \$127,000 to interest expense. As of March 31, 2018, the Company had issued to PFG 367,500 common shares under the loans.

PFG's ability to call the debt on default (contingent put) and its ability to assess interest rate at a default rate (contingent interest) are embedded derivatives, which the Company evaluated. The fair value of these embedded features was determined to be immaterial and was not bifurcated from the debt host for accounting purposes.

Between June 24, 2017 and March 25, 2018, the Company was not in compliance with the loan's revenue and tangible net worth financial covenants and was subject to a default interest rate of 22% per annum which it accrued and paid when due during this period.

On March 26, 2018, concurrent with the execution of the Securities Purchase Agreement for the Series E Shares (see Note 19 – Preferred Stock and Warrants - Series E Senior Convertible Voting Perpetual Preferred Stock), the Company and PFG entered into a modification agreement providing for the restructuring of certain terms associated with approximately \$1.7 million in indebtedness under the 2017 Loan. Subject to the sale of at least \$1.0 million in Series

E Shares, PFG agreed to waive all current defaults and cease applying the applicable default interest rate, returning to the stated non-default rate of 16%, and to lower the revenue and tangible net worth covenants for the remaining term of the loan. As consideration for the modifications, the Company reduced the exercise price of outstanding warrants previously granted to PFG pursuant to the 2014 Loan Agreement and Credit Line to purchase 260,000 shares of the Company's common stock (see 2014 Loan Agreement, Line Credit and Warrants below) from \$1.42 to \$0.25 per share and extended the exercisability of the warrants by one year to March 13, 2020.

The amendments to the 2017 Loan were recognized as a loan modification. The change in fair value of the warrants of \$43,700, resulting from the reduced strike price and extension of term, was recognized as a discount to the 2017 Loan and is being amortized to interest expense over the remaining term of the 2017 Loan.

The Company anticipates it will need to seek additional funds through the issuance of new debt, equity securities or product line sales in order to repay the 2017 Loan (including accrued interest and back end fees) in full upon maturity or otherwise enter into a refinancing agreement with PFG. However, there can be no assurances that such financings, re-financing or product line sales will be available at all, or on terms acceptable to the Company.

#### **2014 Loan Agreement, Line of Credit and Warrants**

On March 13, 2014, the Company entered into a three year, \$2.0 million term loan agreement with PFG under which the Company received \$1.0 million on March 14, 2014.



On June 16, 2014, the Company amended its loan agreement with PFG (the “Amendment”). Under the terms of the Amendment, PFG made a revolving credit line available to Giga-tronics in the amount of \$500,000, which the Company borrowed the entire amount on June 17, 2014. The revolving credit line had a thirty-three month term. The Amendment also reduced the remaining borrowing capacity under the PFG Loan agreement from \$1.0 million to \$500,000. Interest on the initial \$1.0 million term loan was fixed at 9.75% and required monthly interest only payments during the first six months of the agreement followed by monthly principal and interest payments over the remaining thirty months. The interest on the PFG revolving credit line was fixed, calculated on a daily basis at a rate of 12.50% per annum. The Company was allowed to prepay the loan at any time prior to its March 13, 2017 maturity date without a penalty.

On June 3, 2015, the Company further amended its loan agreement with PFG (the “Second Amendment”). The Second Amendment cancelled the Company’s \$500,000 of borrowing availability under the June 2014 Amendment and required the Company to pay PFG \$150,000 towards its existing \$500,000 outstanding balance under the revolving line of credit, which the Company paid in July 2015. The Company also agreed to pay PFG an additional \$10,000 per month towards its remaining credit line balance until repaid, followed by like payments towards its term loan balance until repaid. As of March 26, 2016, the \$500,000 borrowed with the June 2014 Amendment had been fully repaid. The \$500,000 credit line and the \$1.0 million term loan were fully repaid by the Company as of March 25, 2017.

The Company paid a loan fee of \$30,000 upon the initial draw (“First Draw”) and \$15,000 for the June 2014 Amendment. The loan fees paid were recorded as prepaid expenses and amortized to interest expense over the term of the PFG amended loan agreement. In addition, the loan agreement provided for the issuance of warrants convertible into 300,000 shares of the Company’s common stock, of which 180,000 were exercisable upon receipt of the initial \$1.0 million from the First Draw, 80,000 became exercisable with the First Amendment and 40,000 were cancelled as a result of the Second Amendment. Each warrant issued under the loan agreement has a term of five years and an exercise price of \$1.42 per common share.

If the warrants are not exercised before expiration on March 13, 2019, the Company would be required to pay PFG \$150,000 and \$67,000 as settlement for warrants associated with the First Draw and the Amendment, respectively. The warrants could be settled for cash at an earlier date in the event of any acquisition or other change in control of the Company, future public issuance of Company securities or liquidation (or substantially similar event) of the Company. The cash “put” provision results in the warrants being recognized as a derivative liability measured at fair value each reporting period with the change in fair value recorded in the accompanying statement of operations as a gain on adjustment of derivative liability to fair value.

As of March 25, 2017, the estimated fair values of the derivative liabilities associated with the warrants issued in connection with the First Draw and Amendment were \$133,000 and \$89,000, respectively, for a combined value of \$222,000. On March 26, 2018, the Company and PFG agreed to eliminate the cash put provision contained in warrants in exchange for the Company issuing 150,000 shares of the Company’s common stock. Upon removal of the put, the warrants were re-valued using the Black-Scholes option-pricing model prior to being reclassified to equity. The resulting change in fair value of the warrants, along with the fair value of the common stock approximately

\$50,000 issued to PFG, was recognized as gain on adjustment of warrant liability in the consolidated statements of operations.

The initial \$1.0 million in proceeds under the term loan agreement were allocated between the PFG Loan and the warrants based on their relative fair values on the date of issuance, which resulted in initial carrying values of \$822,000 and \$178,000, respectively. The resulting discount of \$178,000 on the PFG Loan was accreted to interest expense under the effective interest method over the term of the PFG Loan, and as of March 25, 2017 had been fully accreted since the \$1.0 million had been fully repaid.

The proceeds from the \$500,000 credit line issued in connection with the Amendment were allocated between the PFG Loan and the warrants based on their relative fair values on the date of issuance, which resulted in initial carrying values of \$365,000 and \$135,000, respectively. The resulting discount of \$135,000 on the PFG Loan was accreted to interest expense under the effective interest method over the term of the PFG Loan, and as of March 26, 2016 had been fully accreted since the \$500,000 from the Amendment had been fully repaid.

For the fiscal year ended March 25, 2017, the Company recorded accretion of discount expense associated with the warrants issued with the PFG Loan of \$22,000.

## **2 Fair Value**

Pursuant to the accounting guidance for fair value measurement and its subsequent updates, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the “exit price”) in an orderly transaction between market participants at the measurement date. The accounting guidance establishes a hierarchy for inputs used in measuring fair value that minimizes the use of unobservable inputs by requiring the use of observable market data when available. Observable inputs are inputs that market participants would use in pricing the asset or liability based on active market data. Unobservable inputs are inputs that reflect the assumptions market participants would use in pricing the asset or liability based on the best information available in the circumstances.

The fair value hierarchy is broken down into the three input levels summarized below:

*Level 1* —Valuations are based on quoted prices in active markets for identical assets or liabilities and readily accessible by us at the reporting date. Examples of assets and liabilities utilizing Level 1 inputs are certain money market funds, U.S. Treasuries and trading securities with quoted prices on active markets.

*Level 2* —Valuations based on inputs other than the quoted prices in active markets that are observable either directly or indirectly in active markets. Examples of assets and liabilities utilizing Level 2 inputs are U.S. government agency bonds, corporate bonds, commercial paper, certificates of deposit and over-the-counter derivatives.

*Level 3* —Valuations based on unobservable inputs in which there are little or no market data, which require us to develop our own assumptions.

The carrying amounts of the Company's cash and cash-equivalents and line of credit approximate their fair values at each balance sheet date due to the short-term maturity of these financial instruments, and generally result in inputs categorized as Level 1 within the fair value hierarchy. The carrying value of the outstanding PFG loan approximates the estimated aggregate fair value and classified with the loan host. The fair value estimate of the embedded equity forward is based on the closing price of the Company's common stock on the measurement date, the risk-free rate, the date of expiration, and any expected cash distributions of the underlying asset before expiration. The estimated fair value of the embedded equity forward represents a Level 2 measurement.

The Company's derivative warrant liability is measured at fair value on a recurring basis and is categorized as Level 3 in the fair value hierarchy. As of March 25, 2017, the warrant liability is valued using a Monte Carlo simulation model, which used the following assumptions as of March 25, 2017: (i) remaining term of 2.0 years, (ii) expected volatility of 101.1%, (iii) risk-free interest rate of 1.26%, and (iv) a discount rate of 24%. The Monte Carlo simulation model simulated the Company's stock price through the maturity date of March 31, 2019. At the end of the simulated period, the value of the warrant was determined based on the greater of (1) the net share settlement value, (2) the net exercise value, or (3) the fixed cash put value.

On March 26, 2018, the Company and PFG agreed to eliminate the cash put provision contained in warrants in exchange for the Company issuing 150,000 shares of the Company's common stock. Upon removal of the put, the warrants were re-valued using the Black-Scholes option-pricing model with the following assumptions: (i) remaining term of 0.96 years, (ii) expected volatility of 85%, (iii) risk-free interest rate of 2.12%, and (iv) no expected dividends. The resulting change in fair value of the warrants, along with the fair value of the common stock issued to PFG, was recognized as an adjustment of warrant liability in the consolidated statements of operations.



The aforementioned warrant liability and equity forward are the Company's only asset and liability recognized and measured at fair value on a recurring or non-recurring basis and are as follows:

**Fair Value Measurements as of March 31, 2018  
(In Thousands):**

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
Warrant Liability	\$ —	—	\$ —
Total	\$ —	—	\$ —

**Fair Value Measurements as of March 25, 2017  
(In Thousands):**

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
Warrant Liability	\$ —	—	\$222
Total	\$ —	\$ —	\$222

There were no transfers between Level 1, Level 2 or Level 3 for the fiscal years ended March 31, 2018 and March 25, 2017.

The following table provides a reconciliation of the warrant liability measured at fair value using significant unobservable inputs (Level 3) for the years ended March 25, 2017 and March 31, 2018:

<b>(In thousands)</b>	<b>Years Ended</b>	
	<b>Mar. 31,</b>	<b>Mar. 25,</b>
	<b>2018</b>	<b>2017</b>
Warrant liability at beginning of year	\$222	\$353
Change in fair value of warrant liability	(222)	(131)
Warrant liability at end of period	\$—	\$222

**10 Sale of Product Lines**

On June 20, 2016, the Company entered into an Asset Purchase Agreement for the sale of its Switch product line to Astronics Test Systems Inc. (Astronics). Upon signing the agreement, Astronics paid \$850,000 for the intellectual property of the product line. The Company recognized a net gain of \$802,000 in the first quarter ended June 25, 2016 after related expenses were subtracted from the sales price. The following table presents the breakdown of the gain recognized related to the asset sale:

**(In thousands)**

Cash received from Astronics	\$850
Cash paid to buy out future commission obligation	(170)
Employee severance	(97)
Legal fees	(13)
Commissions	(46)
Warranty liability released	278
Net gain recognized	\$802

In calculating the gain included in the accompanying consolidated financial statements, the Company released \$278,000 of deferred warranty obligations related to the Switch asset. Pursuant to the terms of the agreement, Astronics assumed all the warranty obligations for the Switch product line, including the products sold prior to the asset being transferred to Astronics. The deferred warranty obligation was previously included in other current liabilities in the consolidated financial statements. The Company also had an existing agreement with a consultant supporting the Switch product line which included a three percent commission on the sales of the Switch product line for a period of 4 years ending in January 2020. The agreement allowed for a buyout of future commissions associated with the Switch product which the Company exercised in connection with the Astronics transaction in June 2016 resulting in a payment by the Company during June of \$170,000. Astronics also purchased approximately \$500,000 of related materials inventory from Giga-tronics between July and August of 2016.

The Company had no revenues or gross margin associated with the Switch product line during fiscal 2018. During fiscal 2017, the Switch product line accounted for approximately \$2.1 million in Giga-tronics Division product revenue and \$437,000 related gross margin. While the Company is able to distinguish revenue and gross margin information related to the sale of the Switch product line to Astronics, the Company is unable to present meaningful information about results of operations and cash flows from the Switch product line.

On December 15, 2015, the Company entered into an Asset Purchase Agreement with Spanawave Corporation, whereby Spanawave agreed to purchase the Giga-tronics Division product lines for its Power Meters, Amplifiers, and Legacy Signal Generators for \$1.5 million. Although the asset purchase agreement was for \$1.5 million, the Company never realized this amount as a result of the dispute with Spanawave as discussed below. The agreement provided for the transfer of these product lines to Spanawave sequentially in six phases beginning with certain sensor and amplifier products. The Company had transferred the Power Meters and Amplifiers in phases one through five, but still holds

the rights to phase 6 (Legacy Signal Generators). During the second quarter ended September 24, 2016, the Company and Spanawave became engaged in a dispute, including litigation initiated by Spanawave and an arbitration proceeding initiated by Spanawave's affiliate Liberty Test Equipment, Inc. ("Liberty Test"), as to whether the Company had fulfilled all the requirements to close phases one through five and become entitled to the \$375,000 received by the Company during the first quarter of fiscal 2017 (see below).

The complaint sought specific performance of the agreement and damages. Spanawave's affiliate Liberty Test also filed an arbitration claim for \$440,000 under a distribution agreement between the Company and Liberty. The Company filed cross-complaints in both the litigation and arbitration asserting breach of the respective agreements by Spanawave and Liberty. The Company had previously asserted that the distribution agreement did not extend to the products with respect to which the claim has been made. The parties negotiated in an effort to settle the dispute notwithstanding the filings. On October 16, 2017, the Company reached a settlement agreement with Spanawave and Liberty Test whereby all parties exchanged mutual releases and agreed that phases one through five of the Asset Purchase Agreement were concluded and the sale of the remaining phase (Phase 6) to Spanawave (which was in dispute) was abandoned. The abandoned Phase 6 Legacy Signal Generators product line (and related inventory) remains an asset of the Company. The Company, Spanawave and Liberty Test also dismissed all arbitration claims as part of the settlement.

During the fourth quarter of fiscal 2016, the Company received \$375,000 from Spanawave. In the first quarter of fiscal 2017, the Company received an additional \$375,000 from Spanawave under the agreement, for a combined total of \$750,000. Of this amount, the Company returned \$375,000 to Spanawave on July 28, 2016 resulting from the dispute regarding the status of phases one through five. The remaining \$375,000 was included in deferred liability related to asset sales in the consolidated balance sheet during the dispute. However, as a result of the settlement of the dispute in the third quarter of fiscal 2018, the Company recognized a net gain of \$324,000, which is net of approximately \$51,000 in expenses associated with the Spanawave asset sale. During the fiscal year ended March 31, 2018 and March 25, 2017, these product lines accounted for approximately zero and \$437,000 in revenue, respectively. In addition, in June 2016, the Company received approximately \$275,000 in exchange for raw material purchases. The purchase price of the raw materials approximated its carrying value, therefore no gain or loss was recognized. While the Company is able to distinguish revenue and gross margin information related to the sale of these product lines, the Company is unable to present meaningful information about results of operations and cash flows from these product lines.

### **11 Selling and Advertising Expenses**

Selling expenses consist primarily of salaries to employees and commissions paid to various sales representatives and marketing agencies. Commission expense totaled \$43,000 and \$121,000 for fiscal 2018 and 2017, respectively. Advertising costs, which are expensed as incurred, totaled \$23,000 and \$58,000 for fiscal 2018 and 2017, respectively.

### **12 Significant Customers and Industry Segment Information**

The Company has two reportable segments: Microsource and the Giga-tronics Division. Microsource develops and manufactures a broad line of Yttrium, Iron and Garnet (YIG) tuned oscillators, filters and microwave synthesizers, which are used in a wide variety of microwave instruments or devices. Microsource's two largest customers are prime contractors for which it develops and manufactures YIG RADAR filters used in fighter jet aircraft.

The Giga-tronics Division designs, manufactures and markets a family of modular test products for use primarily in the electronic warfare (EW) segment of the defense electronics market. These modular test products are used for the construction of test and emulation systems used to validate the performance of EW equipment. Giga-tronics Division customers include major prime defense contractors, the armed services (primarily in the U.S) and research institutes. This product platform for EW test & simulation applications (formerly referred to as "Hydra") has been the Company's principal new product development initiative since 2011 within the test & measurement equipment marketplace, replacing its broad product line of general purpose benchtop test & measurement products used for the design, production, repair and maintenance of products in the aerospace and telecommunications equipment marketplace. The substantial majority of these legacy product lines which the Company produced over the previous 35 years were sold by the Company between 2013 and 2016 in order to fund, in part, the Company's operations and to develop the EW test product platform.



The accounting policies for the segments are the same as those described in the "Summary of Significant Accounting Policies". The Company evaluates the performance of its segments and allocates resources to them based on earnings before income taxes. Segment net sales include sales to external customers. Inter-segment activities are eliminated in consolidation. Assets include accounts receivable, inventories, equipment, cash, deferred income taxes, prepaid expenses and other long- term assets. The Company accounts for inter-segment sales and transfers at terms that allow a reasonable profit to the seller. During the periods reported there were no significant inter-segment sales or transfers.

The Company's reportable operating segments are strategic business units that offer different products and services. They are managed separately because each business utilizes different technology and requires different accounting systems. The Company's chief operating decision maker is considered to be the Company's Chief Executive Officer ("CEO"). The CEO reviews financial information presented on a consolidated basis accompanied by disaggregated information about revenues and pre-tax income or loss by operating segment.

The tables below present information for the fiscal years ended in 2018 and 2017.

#### Giga-tronics

<b>March 31, 2018 (Dollars in thousands)</b>	<b>Division</b>	<b>Microsource</b>	<b>Total</b>
Revenue	\$ 2,737	\$ 7,063	\$9,800
Interest expense, net	(461 )	—	(461 )
Depreciation and amortization	1,116	1	1,117
Capital expenditures	(688 )	—	(688 )
Income/(Loss) before income taxes	(5,847 )	2,748	(3,099)
Assets	5,253	3,178	8,431

**Giga-tronics**

<b>March 25, 2017 (Dollars in thousands)</b>	<b>Division</b>	<b>Microsource</b>	<b>Total</b>
Revenue	\$ 8,021	\$ 8,246	\$16,267
Interest expense, net	133	—	133
Depreciation and amortization	820	7	827
Capital expenditures	41	—	41
Income/(Loss) before income taxes	(2,702 )	1,158	(1,544 )
Assets	6,433	2,641	9,074

The Company's Giga-tronics Division and Microsource segments sell to agencies of the U.S. government and U.S. defense-related customers. In fiscal 2018 and 2017, U.S. government and U.S. defense-related customers accounted for 88% and 78% of sales, respectively. During fiscal 2018, the Boeing Company accounted for 29% of the Company's consolidated revenues and was included in the Microsource segment. A second customer, CSRA LLC (CSRA acted as Prime Contractor for the United States Navy) accounted for 20% of the Company's consolidated revenues during fiscal 2018 and was included in the Giga-tronics Division reporting segment. A third customer, Lockheed Martin accounted for 41% of the Company's revenue and was included in the Microsource segment.

During fiscal 2017, the Boeing Company accounted for 33% of our consolidated revenues and was included in the Microsource reporting segment. A second customer, CSRA LLC (CSRA acted as Prime Contractor for the United States Navy) accounted for 20% of our consolidated revenues during fiscal 2017 and was included in the Giga-tronics Division reporting segment. A third customer, Lockheed Martin accounted for 14% of the Company's revenue and was included in the Microsource segment.

Export sales accounted for 8% and 2% of the Company's sales in fiscal 2018 and 2017, respectively. Export sales by geographical area for these fiscal years are shown below:

	<b>March 31, 2018</b>	<b>March 25, 2017</b>
(Dollars in thousands)		
Americas	\$ —	\$ —
Europe	40	249
Asia	—	15
Rest of world	702	64
Total	\$ 742	\$ 328

**13 Loss per Common Share**

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The stock options, restricted stock, convertible preferred stocks and warrants not included in the computation of diluted earnings per share (EPS) for the fiscal years ended March 31, 2018 and March 25, 2017 is a result of the Company's net loss and, therefore, the effect of these instruments would be anti-dilutive.

Stock options not included in computation that could potentially dilute EPS in the future	1,479	1,105
Restricted stock awards not included in computation that could potentially dilute EPS in the future	300	—
Convertible preferred stock not included in computation that could potentially dilute EPS in the future	1,858	1,853
Warrants not included in computation that could potentially dilute EPS in the future	3,960	3,737
	7,597	6,695

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The stock options, restricted stock, convertible preferred stocks and warrants not included in the computation of diluted earnings per share (EPS) for the fiscal years ended March 31, 2018 and March 25, 2017 is a result of the Company's net loss and, therefore, the effect of these instruments would be anti-dilutive.

#### 14Income Taxes

Following are the components of the provision for income taxes for fiscal years ended:

(in thousands)	March 31, 2018	March 25, 2017
Current		
Federal	\$—	\$—
State	2	2
	2	2
Deferred		
Federal	5,547	(496)
State	(393 )	(6 )
	5,154	(502)
Change in liability for uncertain tax positions	2	14
Change in valuation allowance	(5,156)	488
Provision for income taxes	\$2	\$2

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets are as follows:

Fiscal years ended (In thousands)	March 31, 2018	March 25, 2017
Net operating loss carryforwards	\$11,472	\$15,984
Income tax credits	347	323
Inventory reserves and additional costs capitalized	787	1,450
Accrued vacation	40	109
Deferred rent	136	—
Non-qualified stock options and restricted stock	2	5
Other	77	146
Total deferred tax assets	12,861	18,017

Valuation allowance	(12,861)	(18,017)
Net deferred tax assets	\$—	\$—

On December 22, 2017, the President signed the Tax Cuts and Jobs Act (“TCJ Act”), following its passage by the United States Congress. The TCJ Act provides for significant changes to the U.S. Internal Revenue Code of 1986, as amended, that impact corporate taxation requirements, such as the reduction of the federal tax rate for corporations from 35% to 21% and changes or limitations to certain tax deductions. These changes are generally effective after December 31, 2017. If the taxable year includes the effective date of any rate changes, taxes should be calculated by applying a blended rate to the taxable income for the year. The Company’s taxable year runs from March 26, 2017 through March 31, 2018, therefore a blended corporate rate of 31.55% will apply to its 2017 Tax Year.

As a result of the enactment of the TCJ Act, the Company’s deferred tax assets and liabilities were remeasured using the new corporate tax rate, resulting in a \$5.2 million decrease in gross deferred tax assets with a corresponding decrease in the valuation allowance.

The following summarizes the difference between the income tax expense and the amount computed by applying the statutory federal income tax rates of 31.55% and 34%, respectively, for the years ended March 31, 2018 and March 25, 2017, to income before income tax. The items comprising these differences consisted of the following for the fiscal years ended March 31, 2018 and March 25, 2017:

#### Fiscal years ended

(In thousands except percentages)	March 31, 2018		March 25, 2017	
Statutory federal income tax (benefit)	\$(955 )	31.6 %	\$(525)	34.0 %
Valuation allowance	(5,156)	170.1	488	(31.6)
Effect of reduced corporate tax rates	6,207	(205.3)	—	—
State income tax, net of federal benefit	(177 )	5.9	(90 )	5.8
Net operating loss expiration	—	—	86	(5.6 )
Non-tax deductible expenses	46	(1.5 )	77	(5.0 )
Tax credits	(4 )	0.1	(40 )	2.6
Liability for uncertain tax positions	—	—	14	(0.9 )
Other	41	(0.9 )	(8 )	0.5
Effective income tax	\$2	—	\$2	(0.2 )%

The decrease in valuation allowance from March 25, 2017 to March 31, 2018 was \$5,156,000.

As of March 31, 2018, the Company had pre-tax federal net operating loss carryforwards of \$46,539,000 and state net operating loss carryforwards of \$24,322,000 available to reduce future taxable income. The federal and state net operating loss carryforwards begin to expire from fiscal 2023 through 2038 and from 2028 through 2038, respectively. Utilization of net operating loss carryforwards may be subject to annual limitations due to certain ownership change limitations as required by Internal Revenue Code Section 382. In addition, the TCJ Act imposes new limitations on the utilization of losses incurred in tax years beginning after December 31, 2017. The federal income tax credits begin to expire from 2032 through 2038 and state income tax credit carryforwards are carried forward indefinitely.

The Company has recorded a valuation allowance to reflect the estimated amount of deferred tax assets, which may not be realized. The ultimate realization of deferred tax assets is dependent upon generation of future taxable income during the periods in which those temporary differences become deductible. Management considers both positive and negative evidence and tax planning strategies in making this assessment.

As of March 31, 2018, the Company recorded unrecognized tax benefits of \$122,000 related to uncertain tax positions. The unrecognized tax benefit is netted against the non-current deferred tax asset on the consolidated balance sheet. The Company has not recorded a liability for any penalties or interest related to the unrecognized tax benefits.

The Company files U.S federal and California state tax returns. The Company is generally no longer subject to tax examinations for years prior to the fiscal year 2013 for federal purposes and fiscal year 2012 for California purposes, except in certain limited circumstances. The Company does have a California Franchise Tax Board (“FTB”) audit currently in process. The Company has worked with the FTB to resolve all audit issues and does not believe any material taxes or penalties are due. However, as a result of the ongoing examination, the Company eliminated certain income tax credit carryovers. The write-off of these income tax credit carryovers had no impact on total income tax expense as the majority had an uncertain tax position reserve with the balance having a full valuation allowance against the deferred tax asset.

A reconciliation of the beginning and ending amount of the liability for uncertain tax positions, excluding potential interest and penalties, is as follows:

	<b>Fiscal Years</b>	
(In thousands)	<b>2018</b>	<b>2017</b>
Balance as of beginning of year	\$ 120	\$ 106

Additions based on current year tax positions	2	14
(Reductions) additions for prior year tax positions	—	—
Balance as of end of year	\$122	\$120

The total amount of interest and penalties related to unrecognized tax benefits at March 31, 2018 is not material. The amount of tax benefits that would impact the effective rate, if recognized, is not expected to be material. The Company does not anticipate any significant changes with respect to unrecognized tax benefits within next twelve (12) months.

### **15 Share-based Compensation and Employee Benefit Plans**

*Share-based Compensation* The Company has established the 2005 Equity Incentive Plan, which provides for the granting of stock options and restricted stock for up to 2,850,000 shares of common stock at 100% of fair market value at the date of grant, with each grant requiring approval by the Board of Directors of the Company. In 2014, the term of the 2005 Equity Incentive Plan was extended to 2025. Options granted generally vest in one or more installments in a four or five year period and must be exercised while the grantee is employed by the Company or within a certain period after termination of employment. Options granted to employees shall not have terms in excess of 10 years from the grant date. Holders of options may be granted stock appreciation rights (SAR), which entitle them to surrender outstanding options for a cash distribution under certain changes in ownership of the Company, as defined in the stock option plan. As of March 31, 2018, no SAR's have been granted under the option plan. As of March 31, 2018, the total number of shares of common stock available for issuance is 456,677. All outstanding options have a ten-year life from the date of grant.

Stock Options

The weighted average grant date fair value of stock options granted during the fiscal years ended March 31, 2018 and March 25, 2017 was \$0.93 and \$0.83, respectively, and was calculated using the following weighted-average assumptions:

	March 31, 2018	March 25, 2017
Fiscal years ended	2018	2017
Dividend yield	—	—
Expected volatility	91 %	99 %
Risk-free interest rate	2.40 %	1.45 %
Expected term (years)	8.35	8.36

A summary of the changes in stock options outstanding for the fiscal years ended March 31, 2018 and March 25, 2017 is presented below:

(Dollars in thousands except share prices)	Shares	Price per share	Weighted	
			Weighted Average Exercise Term (Years)	Remaining Contractual Aggregate Intrinsic Value
Outstanding at March 26, 2016	1,592,200	\$ 1.52	6.8	\$ 69
Granted	148,000	0.97		
Exercised	—	—		
Forfeited / Expired	(635,700 )	1.57		
Outstanding at March 25, 2017	1,104,500	\$ 1.41	6.1	\$ 3
Granted	856,000	0.34	10.0	
Exercised	—	—		
Forfeited / Expired	(481,800 )	1.34		
Outstanding at March 31, 2018	1,478,700	\$ 0.56	8.0	\$ —
Exercisable at March 31, 2018	524,450	\$ 0.81	4.8	\$ —



At March 31, 2018, expected to vest in the future      671,805      \$ 0.42      9.8      \$ —

As of March 31, 2018, there was \$215,000 of total unrecognized compensation cost related to non-vested options granted under the 2005 Plan and outside of the 2005 Plan. That cost is expected to be recognized over a weighted average period of 3.9 years and will be adjusted for subsequent changes in estimated forfeitures. There were 143,900 and 272,500 options vested during the fiscal years ended March 31, 2018 and March 25, 2017, respectively. The total fair value of options vested during the fiscal years ended March 31, 2018 and March 25, 2017 was \$163,000 and \$315,000, respectively. There were no exercises in fiscal 2018 and 2017. Share based compensation cost recognized in operating results for the fiscal years ended March 31, 2018 and March 25, 2017 totaled \$251,000 and \$257,000, respectively.

### Restricted Stock

The Company granted 586,950 restricted awards during the fiscal year ended March 31, 2018. The Company granted 44,500 restricted awards during fiscal 2017. The restricted stock awards are considered fixed awards as the number of shares and fair value at the grant date are amortized over the requisite service period net of estimated forfeitures. As of March 31, 2018, there was \$97,000 of total unrecognized compensation cost related to non-vested awards. That cost is expected to be recognized over a weighted average period of 0.89 years and will be adjusted for subsequent changes in estimated forfeitures. Compensation cost recognized for restricted and unrestricted stock for fiscal 2018 and fiscal 2017 totaled \$107,000 and \$29,000, respectively.

A summary of the changes in non-vested restricted stock awards outstanding for the fiscal years ended March 31, 2018 and March 25, 2017 is presented below:

	Shares	Weighted Average Grant Date Fair Value
Non-vested at March 26, 2016	—	\$ —
Granted	44,500	0.66
Vested	(44,500 )	0.66
Forfeited or cancelled	—	—
Non-vested at March 25, 2017	—	\$ —
Granted	586,950	0.66
Vested	(51,000 )	(0.60 )
Forfeited or cancelled	(236,000)	(0.68 )
Non-vested at March 31, 2018	299,950	\$ 0.65

*401(k) Plans* The Company has established 401(k) plans which cover substantially all employees. Participants may make voluntary contributions to the plans for up to 100% of their defined compensation. The Company matches a percentage of the participant's contributions in accordance with the plan. Participants vest ratably in Company contributions over a four- year period. Company contributions to the plans for fiscal 2018 and 2017 were approximately \$27,000 and \$33,000, respectively.

## **16 Commitments and Contingencies**

The Company leased a 47,300 square foot facility located in San Ramon, California that expired in April 2017. On January 5, 2017, the Company entered a seventy-seven-month commercial building lease agreement for a 23,873 square feet facility in Dublin, California. The new lease began on April 1, 2017. The Company's operations were in the Dublin facility as of March 31, 2018.

The Company also leases certain other equipment under operating leases.

Total future minimum lease payments under the new building lease and certain equipment are as follows.

Fiscal year (Dollars in thousands)	
2019	\$436
2020	450
2021	464
2022	472
Thereafter	696
Total	\$2,518

The aggregate rental expense was \$460,000 and \$523,000 in fiscal 2018 and 2017, respectively.

The Company leases certain equipment under capital leases that expire through May 2021. Capital leases with costs totaling \$249,000 and \$249,000 are reported net of accumulated depreciation of \$174,000 and \$113,000 at March 31, 2018 and March 25, 2017, respectively.

Total future minimum lease payments under these capital leases are as follows.

Fiscal year (Dollars in thousands)	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
2019	\$ 52	\$ 12	\$ 64
2020	40	5	45
2021	22	1	23
Total	\$ 114	\$ 18	\$ 132

The Company is committed to purchase certain inventory under non-cancelable purchase orders. As of March 31, 2018, total non-cancelable purchase orders were approximately \$1,260,000 and are scheduled to be delivered to the Company at various dates through March 2019.

**17Warranty Obligations**

The Company records a liability in cost of sales for estimated warranty obligations at the date products are sold. Adjustments are made as new information becomes available. The following provides a reconciliation of changes in the Company's warranty reserve. The Company provides no other guarantees.

	<b>March 31,</b>	<b>March 25,</b>
(In thousands)	<b>2018</b>	<b>2017</b>
Balance as of beginning of year	\$ 123	\$ 60
Provision, net	291	234
Warranty costs incurred	(250 )	(171 )
Balance as of end of year	\$ 164	\$ 123

**18Private Placement Offering**

On January 19, 2016, the Company entered into a Securities Purchase Agreement for the sale of 2,787,872 Units, each consisting of one share of common stock and a warrant to purchase 0.75 shares of common stock, to approximately 20 private investors. The purchase price for each Unit was \$1.24375. Gross proceeds were approximately \$3.5 million. Net proceeds to the Company after fees was approximately \$3.1 million. The portion of the purchase price attributable to the common shares included in each Unit was \$1.15, the consolidated closing bid price for the Company's common stock on January 15, 2016. The warrant price was \$.09375 per Unit (equivalent to \$0.125 per whole warrant share), with an exercise price of \$1.15 per share. The term of the warrants is five years from the date of completion of the transaction. Emerging Growth Equities, Ltd also received warrants to purchase 292,727 shares of common stock at an exercise price of \$1.15 per share as part of its consideration for serving as placement agent in connection with the private placement.

**19Preferred Stock and Warrants****Series E Senior Convertible Voting Perpetual Preferred Stock**

On March 26, 2018, the Company entered into a Securities Purchase Agreement for the sale of 43,800 shares of a newly designated series of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock ("Series E Shares") to approximately 15 private investors. The sale was completed and the Series E Shares were issued on March 28, 2018.

The purchase price for each Series E Share was \$25.00. Gross proceeds received by the Company were approximately \$1.095 million (the "Placement"). Net proceeds to the Company after fees and expenses of the Placement were approximately \$1.0 million. Placement agent fees incurred in connection with the transaction were 5% of gross proceeds or approximately \$57,000 in cash, plus warrants to purchase 5% of the number of common shares into which the Series E shares can be converted (223,000 shares) at an exercise price of \$0.25 per share.

Each Series E Share is initially convertible (at the option of the holder) at a conversion price of \$0.25 per share of common stock, representing 100 shares of the Company's common stock per each Series E Share. The conversion ratio is subject to adjustments for stock splits, stock dividends, recapitalizations and similar transactions. As of March 31, 2018, if all 43,800 issued Series E Shares were immediately converted, holders of such shares would acquire 4,380,000 shares of common stock of the Company, or 31% of the pro forma number of shares of common stock that would be outstanding if the conversion had occurred on this date, 27% of the pro forma number of shares of common stock that would be outstanding upon the conversion of the Company's outstanding shares of Series B, Series C and Series D Convertible Preferred Stock (collectively, the "Previously Issued Preferred Shares") and 22% of the pro forma number of shares of common stock that would be outstanding if all shares of preferred stock were converted and all warrants exercised as of this date. The Company is entitled to redeem Series E Shares at a price equal to 300% of the Series E Share purchase price, or \$75.00 per share, subject to potential adjustment, but the right to redeem is subject to satisfaction of certain conditions related to the market price and trading volume of the Company's common stock.

Each Series E Share has a liquidation preference of 150% of the purchase price or \$37.50, subject to adjustment. In the event of any liquidation, dissolution or winding up of the affairs of the Company, whether voluntary or involuntary, a merger, or a sale of the Company's MSI business line or Simulation and Electronics Warfare business line or their related assets, before any payment or distribution to holders of junior shares (including common stock and Previously Issued Preferred Stock), holders of Series E Shares will be entitled to receive an amount of cash per share of Series E Shares up to the liquidation preference plus all accumulated accrued and unpaid dividends thereon. Upon a sale of the Company's MSI business line or Simulation and Electronics Warfare business line or their related assets, holders of Series E Shares shall be entitled to receive a pro rata portion of the net sale proceeds after reasonable transaction expenses and amount payable to the Company's secured creditors for releases of their liens on such assets, up to the liquidation preference plus accrued and unpaid dividends. If the payment per Series E Shares is less than the Series E Shares' liquidation preference, the liquidation preference and the Series E Share redemption price will be reduced by the amount of the payment received.

Holders of Series E Shares are entitled to receive, when, as and if declared by the Company's Board of Directors, cumulative preferential dividends, payable semiannual in cash at a rate per annum equal to 6.0% of the initial purchase price of \$25.00 per share or in-kind (at the Company's election) through the issuance of shares of the Company's common stock, based on the 10 day volume weighted average price of the common stock.

Holders of Series E Shares generally vote together with the common stock on an as-converted basis on each matter submitted to the vote or approval of the holders of common stock, and vote as a separate class with respect to certain actions that adversely affect the rights of the holders of Series E Shares and on other matters as required by law. In addition, the approval of the Holders of the Series E shares is generally required prior to the Company's issuance of any securities having rights senior to or in parity with the Series E Shares with respect to dividends or liquidation preferences. The Series E Shares' right to approve parity securities will terminate at such time that (1) fewer than 22,300 Series E Shares, which is 50% of the number of Series E Shares first issued, remain outstanding or (2) the volume weighted average closing price of the Company's common stock for any 20 trading days within any 30 trading day period is \$0.75 or more, the average daily trading volume over such 30 trading day period is 100,000 shares or more and there is either an effective registration statement covering resale of the shares of common stock that holders of Series E Shares would be entitled to receive upon conversion and any shares received as pay-in-kind dividends, or such share could be freely sold pursuant to Rule 144 under the Securities Act of 1933, as amended.

The Company and each Series E investor entered into an Investor Rights Agreement. Under this agreement, the Company agreed to, among other things, use best efforts to file certain registration statements for the resale of common stock of the Company that the investor may acquire upon conversion of the Series E Shares and may potentially receive as payment-in-kind dividends during the two years following the date of the agreement. The Company also agreed that it would not issue additional debt without the approval by holders of at least 66.6% of the Series E Shares, other than trade debt incurred in the normal course and commercial bank working capital debt, whether revolving or term debt. Concurrent with the execution of the Securities Purchase Agreement for the Series E Shares, the Company and PFG entered into a modification agreement providing for the restructuring of certain terms associated with approximately \$1.7 million in indebtedness owed to PFG (see Note 8 – Term Loans, Revolving Line of Credit and Warrants).

In connection with the sale of Series E Shares, the Company agreed to reduce the exercise price of certain warrants issued in connection with the Company's private placement in January 2016 (see Note 18 – Private Placement Offering), in which the Company sold (in part) 2,787,872 warrants (a "2016 Warrant"). Each 2016 Warrant entitled the holder to purchase 0.75 shares of the Company's common stock at the price of \$1.15 per whole share. The Company agreed to reduce the exercise price of 2016 Warrants that are held by the 2016 Investors purchasing Series E Shares from \$1.15 to \$0.25 per share as follows: A 2016 Investor purchasing an amount equal to or exceeding the lesser of \$200,000 or 50% of the amount it invested in the 2016 Private Placement will have the exercise price of all of its 2016 Warrants reduced to \$0.25, and 2016 Investors purchasing less than the lesser of \$200,000 or 50% of the amount it invested in the January 2016 Private Placement will have the exercise price of a ratable percentage of the 2016 Warrants reduced to \$0.25. In connection with its sale of the Series E Shares, the Company reduced the exercise price of 1,759,268 of the outstanding 2016 Warrants to \$0.25.

The fair value attributable to re-pricing the 2016 Warrants, provided to the participating 2016 Investors, of approximately \$203,000, was deducted from the Series E gross proceeds to arrive at the initial discounted carrying value of the Series E Shares. The initial discounted carrying value resulted in recognition of a beneficial conversion feature of approximately \$557,000, further reducing the initial carrying value of the Series E Shares. The discount to the aggregate stated value of the Series E Shares, resulting from recognition of the beneficial conversion feature, was immediately accreted as a reduction of common stock and an increase in the carrying value of the Series E Shares. The accretion is presented as a deemed dividend in the consolidated statements of operations.

In addition, warrants to purchase 292,727 shares of common stock held by the placement agent, as a result of a prior transaction, were amended to reduce the exercise price from \$1.15 per share to \$0.25 per share. The fair value attributable to re-pricing the placement agent warrants of approximately \$53,000 was recognized as additional Series E issuance costs and recognized net in the carrying value of Series E Shares.

### **Series B, C, D Convertible Voting Perpetual Preferred Stock and Warrants**

On November 10, 2011, the Company received \$2,199,000 in cash proceeds from Alara Capital AVI II, LLC, a Delaware limited liability company (the “Investor”), an investment vehicle sponsored by Active Value Investors, LLC, under a Securities Purchase Agreement entered into on October 31, 2011. Under the terms of the Securities Purchase Agreement, the Company issued 9,997 shares of its Series B Convertible Voting Perpetual Preferred Stock (“Series B Preferred Stock”) to the Investor at a price of \$220 per share. The Company has recorded \$2.0 million as Series B Preferred Stock on the consolidated balance sheet which is net of stock offering costs of approximately \$202,000 and represents the value attributable to both the convertible preferred stock and warrants issued to the Investor. After considering the value of the warrants, the effective conversion price of the preferred stock was greater than the common stock price on date of issue and therefore no beneficial conversion feature was present.

On February 19, 2013, the Company entered into a Securities Purchase Agreement pursuant to which it agreed to sell 3,424.65 shares of its Series C Convertible Voting Perpetual Preferred Stock (“Series C Preferred Stock”) to the Investor, for aggregate consideration of \$500,000, which is approximately \$146.00 per share. The Company has recorded \$457,000 as Series C Preferred Stock on the consolidated balance sheet, which is net of stock offering costs of approximately \$43,000. As part of this transaction, the Company and the Investor agreed to reduce the number of shares exercisable under the previously issued warrant, and after considering the reduction in the value of the warrant, the effective conversion price of the preferred stock was greater than the common stock price on the date of issue and therefore no beneficial conversion feature was present.

On July 8, 2013 the Company received \$817,000 in net cash proceeds from the Investor under a Securities Purchase Agreement. The Company sold to the Investor 5,111.86 shares of its Series D Convertible Voting Perpetual Preferred Stock (Series D Preferred Stock) and a warrant to purchase up to 511,186 additional shares of common stock at the price of \$1.43 per share. The allocation of the \$858,000 in gross proceeds from issuance of Series D Preferred Stock based on the relative fair values resulted in an allocation of \$498,000 (which was recorded net of \$41,000 of issuance costs) to Series D Preferred Stock and \$360,000 to Common Stock. In addition, because the effective conversion rate based on the \$498,000 allocated to Series D Preferred Stock was \$0.97 per common share which was less than the Company’s stock price on the date of issuance, a beneficial conversion feature was present at the issuance date. The beneficial conversion feature totaled \$238,000 and was recorded as a reduction of common stock and an increase to accumulated deficit.

Each share of Series B, Series C and Series D Preferred Stock is convertible into one hundred shares of the Company’s common stock. In connection with the preferred stock issuance described above, the Company issued to the investor warrants to purchase a total of 1,017,405 common shares at an exercise price of \$1.43 per share. These warrants were exercised in February 2015, and May 2015. The Company received funds from Alara in separate closings dated February 16, 2015 and February 23, 2015. Alara exercised a total of 1,002,818 of its existing Series C and Series D warrants to purchase common shares, all of which had an exercise price of \$1.43 per share for total cash proceeds of \$1,434,000, which was recorded net of \$42,000 of stock issuance costs. As part of the consideration for this exercise, the Company sold to Alara two new warrants to purchase an additional 898,634 and 194,437 common shares at an



exercise price of \$1.78 and \$1.76 per share, respectively, for a total purchase price of \$137,000 or \$0.125 per share. The new warrants have a term of five years and may be paid in cash or through a cashless net share settlement. The Company and Alara amended the remaining 14,587 warrants as part of the February closings. On May 14, 2015, Alara exercised the remaining 14,587 warrants by acquiring 7,216 of shares of the Company's common stock through a cashless net share settlement.

The table below presents information for the fiscal years ended March 31, 2018 and March 25, 2017:

Preferred Stock

**As of March 31, 2018 and March 25, 2017**

	Designated Shares	Shares Issued	Shares Outstanding	Liquidation Preference (in thousands)
Series B	10,000.00	9,997.00	9,997.00	\$ 2,309
Series C	3,500.00	3,424.65	3,424.65	500
Series D	6,000.00	5,111.86	5,111.86	731
Total at March 25, 2017	19,500.00	18,533.51	18,533.51	3,540
Series E	60,000.00	43,800.00	43,800.00	1,643
Total at March 31, 2018	79,500.00	62,333.51	62,333.51	\$ 5,183

**20 Subsequent Events**

During April 2018, the Company issued an additional 6,000 shares of Series E Senior Convertible Voting Perpetual Preferred Stock at a purchase price of \$25.00 per share for total gross proceeds of \$150,000.

During May 2018, the Company issued an additional 2,400 shares of Series E Senior Convertible Voting Perpetual Preferred Stock at a purchase price of \$25.00 per share for total gross proceeds of \$60,000.

**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Shareholders of

Giga-tronics Incorporated

Dublin, California

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Giga-tronics Incorporated and subsidiary (the "Company") as of March 31, 2018, and the related consolidated statements of operations, shareholders' equity, and cash flows for the year then ended, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company as of March 31, 2018, and the consolidated results of its operations and its cash flows for the year then ended, in conformity with U.S. generally accepted accounting principles.

The Company's Ability to Continue as a Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company's significant recurring losses and accumulated deficit raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

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

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

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

We have served as the Company's auditor since 2018.

/s/ Armanino<sup>LLP</sup>  
San Ramon, California

June 19, 2018

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

Shareholders and the Board of Directors of Giga-tronics Incorporated

Dublin, California

**Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of Giga-tronics Incorporated (the "Company") as of March 25, 2017, the related consolidated statements of operations, shareholders' equity, and cash flows for the year ended March 25, 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of March 25, 2017, and the results of its operations and its cash flows for the year ended March 25, 2017, in conformity with accounting principles generally accepted in the United States of America.

**Basis for Opinion**

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

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

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

/s/ Crowe Horwath LLP

We have served as the Company's auditor from 2005 to January 4, 2018.

San Francisco, California

June 20, 2017

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## **INFORMATION NOT REQUIRED IN PROSPECTUS**

### **ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.**

The following table sets forth the costs and expenses payable by us in connection with the issuance and distribution of the securities being registered. None of the following expenses are payable by the Selling Securityholders. All of the amounts shown are estimates, except for the SEC registration fee.

SEC registration fee	\$599.15
Legal fees and expenses	30,000.00
Accounting fees and expenses	5,000.00
Miscellaneous	
TOTAL	\$35,599.15

### **ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS.**

The Company's Articles of Incorporation provide that the liability of our directors for monetary damages shall be eliminated to the fullest extent permissible under California law. Our Articles also provide that we are authorized to provide indemnification of directors and other agents for breach of duty to the corporation and its shareholders through bylaw provisions or through agreements with the agents, or both, in excess of the indemnification otherwise permitted by Section 317 of the California Corporations Code, subject only to the limitations on excess indemnification set forth in Section 204 of the California Corporations Code with respect to actions for breach of duty to the corporation and its shareholders. The Company's bylaws provide that the Company shall indemnify any person who is or was a party or is threatened to be made a party to any proceeding by reason of the fact that that person is or was an agent of the Company. The Company also maintains officers and director's liability insurance.

### **ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES.**

The following securities were sold pursuant to the exemption afforded under Section 4(a)(2) of the Securities Act of 1933. Proceeds are or will be used for general corporate purposes.

## Edgar Filing: GIGA TRONICS INC - Form S-1

On September 28, 2018, we sold 400 Series E Shares to approximately five investors at the price of \$25.00 per share. We also issued to Emerging Growth Equities Ltd a warrant purchase 1,000 shares of common stock at the price of \$0.25 per share.

On September 21, 2018, we sold 1,260 Series E Shares to approximately five investors at the price of \$25.00 per share. We also issued to Emerging Growth Equities Ltd a warrant purchase 3,150 shares of common stock at the price of \$0.25 per share.

On August 27, 2018, we sold 6,500 Series E Shares to approximately five investors at the price of \$25.00 per share. We also issued to Emerging Growth Equities Ltd a warrant purchase 16,250 shares of common stock at the price of \$0.25 per share.

On August 17, 2018, we sold 7,840 Series E Shares to approximately five investors at the price of \$25.00 per share. We also issued to Emerging Growth Equities Ltd a warrant purchase 29,600 shares of common stock at the price of \$0.25 per share.

On August 2, 2018, we sold 1,400 Series E Shares to approximately five investors at the price of \$25.00 per share. We also issued to Emerging Growth Equities Ltd a warrant purchase 3,500 shares of common stock at the price of \$0.25 per share.

On June 7, 2018, we sold 400 Series E Shares to approximately two investors at the price of \$25.00 per share. We also issued to Emerging Growth Equities Ltd a warrant purchase 1,000 shares of common stock at the price of \$0.25 per share.

On May 9, 2018, we sold 2,400 Series E Shares to approximately two investors at the price of \$25.00 per share. We also issued to Emerging Growth Equities Ltd a warrant purchase 6,000 shares of common stock at the price of \$0.25 per share.

On April 6, 2018 we sold 6,000 Series E Shares to approximately three investors at the price of \$25.00 per share. We also issued to Emerging Growth Equities Ltd a warrant purchase 13,000 shares of common stock at the price of \$0.25 per share.

On March 26, 2018, we issued 150,000 shares of our common stock to Partners for Growth V, L.P. (“PFG”) in exchange for PFG’s agreement to eliminate the “put” feature of certain warrants that we had previously issued.

On March 20, 2018, in consideration of his agreement to join us an executive officer and employee, we granted Lutz P. Henckels, a director and our acting chief financial officer, an option to purchase 400,000 shares of common stock at the price of \$0.33 per share based on reliance on the exemption afforded by Section 4(2) of the Securities Act. One fourth of the option vests on the first anniversary of the grant date and 1/48 of the option vests on each of the 36 months thereafter.

On January 29, 2016, we sold 2,787,872 units, each consisting of one share of common stock and a warrant to purchase 0.75 shares of common stock, to approximately 20 investors. The purchase price for each unit was \$1.24375. Each warrant represented the right to purchase one share of our common stock at the price of \$1.15 per share.

#### ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

- 3.1 Articles of Incorporation of the Company, as amended, incorporated by reference to Exhibit 3.1 to the Company’s Annual Report on Form 10-K for the fiscal year ended March 27, 1999.
- 3.2 Certificate of Determination of Preferences of Preferred Stock Series A of the Company, incorporated by reference to Exhibit 3.1 to the Company’s Annual Report on Form 10-K for the fiscal year ended March 27, 1999.
- 3.3 Certificate of Determination of Series B Convertible Voting Perpetual Preferred Stock of the Company, incorporated by reference to Exhibit 3.1 to the Company’s Current Report on Form 8-K filed on November 14, 2011.
- 3.4 Certificate of Determination of Series C Convertible Voting Perpetual Preferred Stock of the Company, incorporated by reference to Exhibit 3.1 to the Company’s Current Report on Form 8-K filed on February 25, 2013.
- 3.5 Certificate of Determination of Series D Convertible Voting Perpetual Preferred Stock of the Company, incorporated by reference to Exhibit 3.1 to the Company’s Current Report on Form 8-K filed on July 3, 2013.
- 3.6 Certificate of Determination of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock of the Company, incorporated by reference to Exhibit 3.1 to the Company’s Current Report on Form 8-K filed on March



30, 2018.

- Certificate of Amendment to Certificate of Determination of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock of the Company, incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on August 20, 2018.
- 3.7 Amended and Restated Bylaws of the Company, incorporated by reference to Exhibit 3.2 to the Company's Annual Report on Form 10-K for the fiscal year ended March 29, 2008.
- 3.8 Opinion of Sheppard, Mullin, Richter and Hampton, LLP as to the securities being registered.
- 5.1 Form of Indemnification Agreement between the Company and each of its directors and officers, incorporated by reference to Exhibit 10.1 to the Company's Annual Report on Form 10-K for the fiscal year ended March 27, 2010.
- 10.1 2005 Equity Incentive Plan, incorporated by reference to Attachment A to the Company's Proxy Statement on Form DEF 14A filed on July 21, 2005. \*
- 10.2 Amended and Restated Warrant between the Company and Partners for Growth IV, L.P. dated June 16, 2014, incorporated by reference to Exhibit 10.6 to the Company's Annual Report on Form 10-K for the fiscal year ended March 29, 2014.
- 10.3 Amended and Restated Warrant between the Company and SVB Financial Group dated June 16, 2014, incorporated by reference to Exhibit 10.7 to the Company's Annual Report on Form 10-K for the fiscal year ended March 29, 2014.
- 10.4

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10.5 Amended and Restated Warrant between the Company and PFG Equity Investors, LLC dated June 16, 2014, incorporated by reference to Exhibit 10.8 to the Company's Annual Report on Form 10-K for the fiscal year ended March 29, 2014.

10.6 Securities Purchase Agreement between the Company and Alara Capital AVI II, LLC dated June 27, 2013, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 3, 2013.

10.7 Securities Purchase Agreement between the Company and Alara Capital AVI II, LLC dated February 16, 2015, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 20, 2015.

10.8 Warrant to Purchase 898,634 Shares of Common Stock between the Company and Alara Capital AVI II, LLC dated February 16, 2015, incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on February 20, 2015.

10.9 Warrant to Purchase 194,437 Shares of Common Stock between the Company and Alara Capital AVI II, LLC dated February 23, 2015, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on February 27, 2015.

10.10 Investor Rights Agreement between the Company and Alara Capital AVI II, LLC dated November 10, 2011, incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on November 14, 2011.

10.11 Investor Rights Agreement between the Company and Alara Capital AVI II, LLC dated July 8, 2013, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on July 12, 2013.

10.12 Investor Rights Agreement between the Company and Alara Capital AVI II, LLC dated February 16, 2015, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on February 20, 2015.

10.13 Amendment No. 1 to Securities Purchase Agreement and Investor Rights Agreement between the Company and Alara Capital AVI II, LLC dated February 23, 2015, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 27, 2015.

10.14 Severance Agreement between the Company and John R. Regazzi dated June 3, 2010, incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on August 9, 2010. \*

10.15

Lease Agreement between the Company and SF II Creekside LLC dated January 5, 2017, incorporated by reference to Exhibit 10.17 to the Company's Annual Report on Form 10-K for the year ended March 31, 2018.

10.16 Loan and Security Agreement between the Company and Partners for Growth V. L.P. dated April 27, 2017, incorporated by reference to Exhibit 10.18 to the Company's Annual Report on Form 10-K for the year ended March 31, 2018.

10.17 Asset Purchase Agreement between the Company and Spanawave Corporation, incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on February 8, 2016.

10.18 Form of Securities Purchase Agreement dated January 19, 2016, between the Company and individual investors, incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-3 (File No. 333-210157) filed on March 14, 2016.

10.19 Form of Warrant Agreement dated January 29, 2016, between the Company and individual investors, incorporated by reference to Exhibit 10.2 to the Company's Registration Statement on Form S-3 (File No. 333-210157) filed on March 14, 2016.

10.20 Investor Rights Agreement dated January 15, 2016, between the Company and individual investors, incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K for the year ended March 31, 2018.

10.21 Investor Rights Agreement dated March 26, 2018, between the Company and the investor parties thereto, incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed on March 30, 2018.

10.22 Conditional Waiver and Modification to Loan and Security Agreement dated March 26, 2018 between the Company and Partners For Growth incorporated by reference to Exhibit 10.24 to the Company's Annual Report on Form 10-K for the year ended March 31, 2018.

10.23 Stock Option Award Agreement between the Company and Lutz Henckels dated June 6, 2018, incorporated by reference to Exhibit 10.25 to the Company's Annual Report on Form 10-K for the year ended March 31, 2018.\*

10.24 2018 Equity Incentive Plan, incorporated by reference to Attachment A to the Company's Proxy Statement on Form DEF 14A filed on July 30, 2018. \*

16 Letter from the Company's former certifying accountants dated January 9, 2018, incorporated by reference to Exhibit 16.1 to the Company's Form 8-K filed on January 9, 2018.

19 Significant Subsidiaries (incorporated by reference to Exhibit 20 to the Company's Form 10-K filed on June 19, 2018)

23.1 Consent of Independent Registered Public Accounting Firm, Crowe LLP.

23.2 Consent of Independent Registered Public Accounting Firm, Armanino LLP.

23.3 Consent of Sheppard, Mullin, Richter and Hampton, LLP (included in Exhibit 5.1).

24 Power of Attorney (included on signature page).

\* Management contract or compensatory plan or arrangement.

## ITEM 17. UNDERTAKINGS.

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) To include any prospectus required by section 10(a)(3) of the Securities Act;  
To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which
  - (ii) was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.
  - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, if the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part (4) of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of (5) the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes to provide to the underwriter at the closing specified in the underwriting agreements certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

## **SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Dublin, State of California, on October 17, 2018.

Giga-tronics  
Incorporated

By/s/ John R. Regazzi

John R. Regazzi  
Chief Executive  
Officer

## **POWER OF ATTORNEY**

Each of the undersigned officers and directors does hereby constitute and appoint John R. Regazzi and Lutz P. Henckels, and each of them, or their substitute or substitutes, as his or her true and lawful attorneys-in-fact and agents, with full power and authority to do any and all acts and things and to execute and file or cause to be filed any and all instruments, documents or exhibits which said attorneys and agents, or either one of them, determine may be necessary or advisable or required to enable said corporation to comply with the Securities Act of 1933, as amended, and any rules or regulations or requirements of the Securities and Exchange Commission in connection with this registration statement. Without limiting the generality of the foregoing power and authority, the powers granted include the power and authority to sign the names of the undersigned officers and directors in the capacities indicated below to this registration statement, to any and all amendments, both pre-effective and post-effective, and supplements to this registration statement and to any and all instruments, documents or exhibits filed as part of or in conjunction with this registration statement or amendments or supplements thereof, with the powers of substitution and revocation, and each of the undersigned hereby ratifies and confirms all that said attorneys and agents, or either one of them, or their substitute or substitutes, shall lawfully do or cause to be done by virtue hereof. In witness whereof, each of the undersigned has executed this Power of Attorney as of the dates indicated below.

In accordance with the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates stated.



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<b>Signature</b>	<b>Title</b>	<b>Date</b>
<u>/s/ Gordon L. Almquist</u> Gordon L. Almquist	Director	October 17, 2018
<u>/s/ Lutz P. Henckels</u> Lutz P. Henckels	Executive Vice President, Chief Financial Officer (Principal Financial and Accounting Officer) and Director	October 17, 2018
<u>/s/ John R. Regazzi</u> John R. Regazzi	Chief Executive Officer (Principal Executive Officer) and Director	October 17, 2018
<u>/s/ William J. Thompson</u> William J. Thompson	Director and Chairman of the Board	October 17, 2018
<u>/s/ Jamie Weston</u> Jamie Weston	Director	October 17, 2018

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