

GIGA TRONICS INC  
Form 10-Q  
November 14, 2017

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

**FORM 10-Q**

QUARTERLY REPORT PURSUANT TO  
 SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934  
For the quarterly period ended **September 30, 2017**  
OR

TRANSITION REPORT  
 PURSUANT TO SECTION 13  
OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934  
For the transition period from to

Commission File No. **001-14605**

**GIGA-TRONICS INCORPORATED**  
(Exact name of registrant as specified in its charter)

**California**  
(State or other jurisdiction of incorporation or organization)

**94-2656341**  
(I.R.S. Employer Identification No.)

**5990 Gleason Drive, Dublin CA 94568**  
(Address of principal executive offices)

**(925) 328-4650**  
Registrant's telephone number, including area code

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days:

Yes  No

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Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

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

Large accelerated filer  Accelerated filer   
Non-accelerated filer  Smaller reporting company   
(Do not check if a smaller reporting company) Emerging growth company

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

Indicate by check mark whether the registrant is a shell company (as defined in Exchange Act Rule 12b-2).

Yes  No

There were a total of 10,178,153 shares of the Registrant’s Common Stock outstanding as of November 10, 2017.

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## FORWARD-LOOKING STATEMENTS

This report on Form 10-Q contains forward-looking statements about Giga-tronics Incorporated (the “Company”) for which it claims the protection of the safe harbor provisions contained in the Private Securities Litigation Reform Act of 1995. Examples of forward-looking statements include, but are not limited to: (i) projections of revenues, expenses, income or loss, earnings or loss per share, capital structure and other financial items; (ii) statements of plans, objectives and expectations of the Company or its management or board of directors, including those relating to products, revenue or cost savings; (iii) statements of future economic performance; and (iv) statements of assumptions underlying such statements. Words such as "believes", "anticipates", "expects", "intends", "targeted", "projected", "continue", "remain", "will", "should", "may" and other similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements.

These forward-looking statements are based on Management’s current knowledge and belief and include information concerning the Company’s possible or assumed future financial condition and results of operations. A number of factors, some of which are beyond the Company’s ability to predict or control, could cause future results to differ materially from those contemplated. These factors include but are not limited to risks related to (1) the Company’s potential inability to obtain necessary capital to finance its operations and to continue as a going concern; (2) the Company’s ability to develop competitive products in a market with rapidly changing technology and standards; (3) the results of pending or threatened litigation; (4) risks related to customers’ credit worthiness/profiles; (5) changes in the Company’s credit profile and its ability to borrow; (6) a potential decline in demand for certain of the Company’s products; (7) potential product liability claims; (8) the potential loss of key personnel; and (9) U.S. and international economic conditions. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations. The reader is directed to the Company's annual report on Form 10-K for the year ended March 25, 2017 or further discussion of factors that could affect the Company's business and cause actual results to differ materially from those expressed in any forward-looking statement made in this report. The Company undertakes no obligation to update any forward-looking statements in this report.

**PART I – FINANCIAL INFORMATION****ITEM 1 - FINANCIAL STATEMENTS****GIGA-TRONICS INCORPORATED****CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)**

<b>(In thousands except share data)</b>	<b>September 30,</b>	<b>March 25,</b>
	<b>2017</b>	<b>2017</b>
<b>Assets</b>		
Current assets:		
Cash and cash-equivalents	\$ 542	\$ 1,421
Trade accounts receivable, net of allowance of \$11 and \$45, respectively	932	954
Inventories, net	5,200	4,811
Prepaid expenses and other current assets	194	452
Total current assets	6,868	7,638
Property and equipment, net	1,008	528
Other long-term assets	175	175
Capitalized software development costs	431	733
<b>Total assets</b>	<b>\$ 8,482</b>	<b>\$ 9,074</b>
<b>Liabilities and shareholders' (deficit) equity</b>		
Current liabilities:		
Line of credit	\$ 552	\$ 582
Accounts payable	1,072	1,107
Loan payable, net of discounts and issuance costs	1,370	—
Equity forward, at estimated fair value	36	—
Accrued payroll and benefits	380	583
Deferred revenue	3,389	3,614
Capital lease obligations	54	50
Deferred liability related to asset sale	375	375
Deferred rent	51	—
Other current liabilities	831	707
Total current liabilities	8,110	7,018
Warrant liability, at estimated fair value	162	222
Long term deferred rent	459	—
Long term obligations - capital lease	86	114
<b>Total liabilities</b>	<b>8,817</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 September 30, 2017 and March 25, 2017 issued and	—	—

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outstanding		
Series B, C, D- designated 19,500 shares; 18,533.51 shares at September 30, 2017 and March 25, 2017 issued and outstanding; (liquidation preference of \$3,540 at September 30, 2017 and March 25, 2017)	2,911	2,911
Common stock of no par value; Authorized - 40,000,000 shares; 10,173,153 shares at September 30, 2017 and 9,594,203 shares at March 25, 2017 issued and outstanding	24,674	24,390
Accumulated deficit	(27,920 )	(25,581)
<b>Total shareholders' (deficit) equity</b>	(335 )	1,720
<b>Total liabilities and shareholders' (deficit) equity</b>	\$ 8,482	\$9,074

*See Accompanying Notes to Unaudited Condensed Consolidated Financial Statements*

**GIGA-TRONICS INCORPORATED****CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)**

	<b>Three Month Periods Ended</b>		<b>Six Month Periods Ended</b>	
	<b>September 30,</b>	<b>September 24,</b>	<b>September 30,</b>	<b>September 24,</b>
<b>(In thousands except per share data)</b>	<b>2017</b>	<b>2016</b>	<b>2017</b>	<b>2016</b>
<b>Net sales</b>	\$2,242	\$ 4,393	\$4,233	\$ 7,835
Cost of sales	1,755	3,163	3,280	5,680
<b>Gross margin</b>	487	1,230	953	2,155
Operating expenses:				
Engineering	409	567	861	1,097
Selling, general and administrative	1,096	1,047	2,267	2,352
Total operating expenses	1,505	1,614	3,128	3,449
<b>Operating loss</b>	(1,018)	(384 )	(2,175)	(1,294 )
Gain on sale of product line	—	—	—	802
Gain on adjustment of warrant liability to fair value	60	28	60	74
Interest expense:				
Interest expense, net	(88 )	(31 )	(167 )	(60 )
Interest expense from accretion of loan discount	(33 )	(7 )	(55 )	(18 )
Total interest expense, net	(121 )	(38 )	(222 )	(78 )
<b>Loss before income taxes</b>	(1,079)	(394 )	(2,337)	(496 )
Provision for income taxes	2	2	2	2
<b>Net loss</b>	<b>\$(1,081)</b>	<b>\$ (396 )</b>	<b>\$(2,339)</b>	<b>\$ (498 )</b>
<b>Loss per common share - basic</b>	<b>\$(0.11 )</b>	<b>\$ (0.04 )</b>	<b>\$(0.24 )</b>	<b>\$ (0.05 )</b>
<b>Loss per common share - diluted</b>	<b>\$(0.11 )</b>	<b>\$ (0.04 )</b>	<b>\$(0.24 )</b>	<b>\$ (0.05 )</b>
<b>Weighted average shares used in per share calculation:</b>				
Basic	9,791	9,550	9,754	9,550
Diluted	9,791	9,550	9,754	9,550

*See Accompanying Notes to Unaudited Condensed Consolidated Financial Statements*

**GIGA-TRONICS INCORPORATED****CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)**

<b>(In thousands)</b>	<b>Six Month Periods Ended</b>	
	<b>September 30,</b>	<b>September 24,</b>
	<b>2017</b>	<b>2016</b>
<b>Cash flows from operating activities:</b>		
Net loss	\$(2,339)	\$ (498 )
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Depreciation and amortization	201	182
Share based compensation	118	151
Adjustment of warrant liability to fair value	(60 )	(74 )
Capitalized software development costs	302	(334 )
Accretion of discounts and issuance costs on debt	55	27
Accretion interest on debt	61	—
Change in deferred rent	510	(71 )
Gain on sale of product line	—	(802 )
Changes in operating assets and liabilities		
Trade accounts receivable	22	379
Inventories	(389 )	235
Prepaid expenses and other assets	258	(29 )
Accounts payable	(35 )	(850 )
Accrued payroll and benefits	(203 )	(67 )
Deferred revenue	(225 )	2,555
Other current liabilities	124	(346 )
<b>Net cash (used in) provided by operating activities</b>	<b>(1,600)</b>	<b>458</b>
<b>Cash flows from investing activities:</b>		
Cash received from sale of product lines	—	1,225
Cash returned related to sale of product line	—	(375 )
Purchases of property and equipment	(681 )	(30 )
<b>Net cash (used in) provided by investing activities</b>	<b>(681 )</b>	<b>820</b>
<b>Cash flows from financing activities:</b>		
Proceeds from borrowings, net of issuance costs	1,456	—
Repayments of debt	—	(260 )
Repayments of line of credit	(30 )	—
Principal payments on capital leases	(24 )	(21 )
<b>Net cash provided by (used in) financing activities</b>	<b>1,402</b>	<b>(281 )</b>
<b>(Decrease)/Increase in cash and cash-equivalents</b>	<b>(879 )</b>	<b>997</b>



<b>Beginning cash and cash-equivalents</b>	1,421	1,331
<b>Ending cash and cash-equivalents</b>	\$542	\$ 2,328
<b>Supplementary disclosure of cash flow information:</b>		
Cash paid for income taxes	\$2	\$ 2
Cash paid for interest	\$88	\$ 46
<b>Supplementary disclosure of noncash financing activities:</b>		
Common stock issued in connection with debt issuance	\$166	\$ —
Equipment disposal	\$377	\$ 174

*See Accompanying Notes to Unaudited Condensed Consolidated Financial Statements*

## 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 (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 25, 2017.

*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.

*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.

*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 in accordance with the guidance provided by ASC 205-20 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 9, 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 9, 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.

*New Accounting Standards* 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 adoption of this guidance did not have a material impact on the Company’s consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09 (“ASU 2016-09”), *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. ASU 2016-09 simplifies several aspects of the accounting for employee share-based payments, including accounting for income taxes, forfeitures, statutory tax withholding requirements, and classification on the statement of cash flows. The amendments in this ASU are effective for annual periods beginning after December 15, 2016, with early adoption permitted. The Company adopted this standard in the first quarter ended June 24, 2017, the adoption of this guidance did not have a material impact on the Company’s consolidated financial statements.

In May 2017, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2017-09 (“ASU 2017-09”), *Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting*. ASU 2017-09 was issued to provide guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. The amendments in this ASU are effective for annual periods beginning after December 15, 2017. The Company does not expect that the standard will have a material effect on its consolidated financial statements and will apply this guidance to applicable transactions after the adoption date.

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 in March, April, May, and December 2016 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. On July 9, 2015, the FASB approved a one year deferral of the effective date of ASU 2014-09 to annual reporting periods beginning after December 15, 2017. The Company has not yet completed its evaluation of the impact of ASU 2014-09 on its past and future revenue recognition and related disclosure.

## **2) Going Concern and Management’s Plan**

The Company incurred net losses of \$1.1 million for the second quarter and \$2.3 million for the first half of fiscal 2018, respectively. These losses have contributed to an accumulated deficit of \$27.9 million as of September 30, 2017. The Company used cash flow in operations totaling \$1.6 million in the first half of fiscal 2018.

The Company has experienced delays in the development of features, receipt of orders, and shipments for the new Advanced Signal Generator (“ASG”). These delays have contributed, in part, to a decrease in working capital. The new ASG product has shipped to several customers, but potential delays in the development or refinement of features, longer than anticipated sales cycles, or uncertainty as to the Company’s ability to efficiently manufacture the ASG, 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 September 30, 2017, the line of credit had a balance of \$552,000.

These matters raise substantial doubt as to the Company’s ability to continue as a going concern.

To address these matters, the Company's management has taken several actions to provide additional liquidity and reduce costs and expenses going forward. These actions are described in the following paragraphs:

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.

On April 27, 2017, the Company entered into a new loan agreement with Partners For Growth V, L.P. ("PFG"). Under the terms of the agreement, PFG made a term loan to the Company in the principal amount of \$1,500,000, with funding occurring on April 28, 2017. The loan has a two-year term, with interest only payments for the term of the loan. However, as of June 24, 2017 and September 30, 2017, the Company was not in compliance with the loan's revenue and shareholders' equity covenants. On August 2, 2017, the Company and PFG entered into a short-term forbearance arrangement with respect to such noncompliance which expired on October 15, 2017. The Company is continuing to work with PFG to extend the previous agreed upon forbearance agreement, however, no assurance can be given that the Company will be able to extend the forbearance agreement beyond the initial forbearance period or agree on any amendments to the loan agreement including any revised covenants due to its current noncompliance. The default interest rate associated with any forbearance agreement is 6%, which is in addition to the loan's aggregate per annum interest rate (see Note 7 – Term Loan, Revolving Line of Credit and Warrants). The Company will need to raise additional capital to rectify the noncompliance. No assurance can be given that the Company will be able to raise sufficient capital on timely basis.

In March 2017 and July 2017, Microsource received two orders totaling \$875,000 associated with its high performance YIG filter used on an aircraft platform; we started shipping a portion of the filters in the second quarter of fiscal 2018.

In July 2017, the Giga-tronics Division received a \$1.7 million order from the United States Navy for the Real-Time Threat Emulation Systems ("TEMS"), which is a combination of the Advanced Signal Generator ("ASG") hardware platform, along with software developed and licensed to the Company from a major Aerospace and Defense Company. The Company expects to ship this order in the second half of fiscal 2018.

In the first quarter of fiscal 2016, the Company's Microsource business unit also finalized a multiyear \$10.0 million YIG production order ("YIG Production Order"). The Company started shipping the YIG Production Order in the second quarter of fiscal 2017, and we expect to ship the remainder through fiscal 2020.

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. In the second quarter of fiscal 2018, the Company entered into advance payment arrangements totaling \$300,000. 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 the business 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 through debt, equity financing or possible product line sales, however, there are no assurances that such financings or sales will be available at all, or on terms acceptable to the Company.

The Company's historical operating results and forecasting uncertainties indicate that substantial doubt exists related to the Company's ability to continue as a going concern. Forecasting uncertainties exist with respect to the ASG 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 the Company's 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 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. The Company limits the amount of revenue recognition for delivered elements to the amount that is not contingent on the future delivery of products or services, future performance obligations, or subject to customer-specified return or refund privileges. The Company evaluates each deliverable in an arrangement to determine whether they represent separate units of accounting. 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 will be tied to product shipping while others will be tied to design review.

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 have 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 Company provides for estimated costs that may be incurred for product warranties at the time of shipment. The Company's warranty policy generally provides twelve to eighteen months depending on the customer. 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.

**(4) Inventories**

Inventories consisted of the following:

<b>(In thousands)</b>	<b>September 30, 2017</b>	<b>March 25, 2017</b>
Raw materials	\$ 1,601	\$1,775
Work-in-progress	2,944	2,155
Finished goods	222	473
Demonstration inventory	433	408
Total	\$ 5,200	\$4,811

**(5) Software Development Costs**

On September 3, 2015, the Company entered 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 ASG.

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 ASG product sold with the OLS software (ASG TEmS) 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 September 30, 2017, and March 25, 2017, capitalized software costs were \$431,000 and \$733,000, respectively. The Company began amortizing the costs of capitalized software to cost of sales in third quarter of fiscal 2017 using the straight-line methodology over an estimated three-year amortization period. During the fourth quarter of fiscal 2017, the Company changed its estimated amortization period from three years to two years due to the longer than anticipated procurement cycle associated with the ASG TEmS product line. The Company also amortized capitalized software costs using the estimated percentage of revenue approach (which was greater than straight-line amortization) in the fourth quarter of fiscal 2017. During the three and six-month periods ended September 30, 2017, the Company had no revenues associated with its ASG TEmS product line and therefore amortized capitalized software costs on a straight-line basis. Amortization of capitalized software costs recorded during the first and second quarter of fiscal 2018 were \$151,000, respectively. There was no amortization recorded in the first and second quarter of fiscal 2017 as the Company had not yet released its ASG TEmS product line.

**(6) 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 4.25% at September 30, 2017 resulting in an interest rate of 5.75%). 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 at September 30, 2017, because of the PFG noncompliance described in Note 7 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 September 30, 2017, the Company's total outstanding borrowings under the Bridge Bank line of credit were \$552,000.

#### **(7) Term Loan, Revolving Line of Credit and Warrants**

On April 27, 2017, the Company entered into a new loan agreement with PFG. Under the terms of the agreement, PFG made a term loan to Giga-tronics in the principal amount of \$1,500,000, with funding occurring on April 28, 2017.

The loan has a two-year term, with interest only payments for the term of the loan. The principal amount of the loan plus any accrued interest will be due upon maturity. The loan bears interest at an aggregate per annum rate equal to 16% per annum, fixed, which is comprised of cash interest reflecting a 9.5% per annum rate and deferred interest reflecting a 6.5% per annum rate. The Company will pay the cash interest monthly and will accrue deferred interest on the unpaid principal balance. The deferred interest will be due and payable upon maturity. In addition, the Company agreed to pay PFG a charge of up to \$100,000 due and 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 (of any amount) 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. To stay in compliance with the loan terms, the Company must meet certain financial covenants associated with minimum quarterly revenues and monthly minimum shareholders' equity. The lender can accelerate the maturity of the loan in case of a default. The Company can prepay the loan before maturity at any time without fee or penalty.



In connection with its loan to the Company, PFG will receive up to 250,000 shares of common stock, 190,000 of which was earned on 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 (of any amount) is outstanding during any day of the prior month.

The Company has pledged all its assets as collateral for the loan made by PFG, including all its accounts, inventory, equipment, deposit accounts, intellectual property and all other personal property. The PFG loan is subordinate to the Bridge Bank line of credit (see Note 6, 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 Condensed 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
Backend 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 Condensed Consolidated Balance Sheets. The debt discount is amortized to interest expense over the loan's term using the effective interest method.

During the three and six-month periods ended September 30, 2017, the Company amortized discounts of approximately \$33,000 and \$22,000, respectively, to interest expense.

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.

As of June 24, 2017, and September 30, 2017, the Company was not in compliance with the loan's revenue and shareholders' equity covenants. On August 2, 2017, the Company and PFG entered into a short-term forbearance arrangement with respect to such noncompliance which expired on October 15, 2017. The Company is continuing to work with PFG to extend the previous agreed upon forbearance agreement, however, no assurance can be given that the Company will be able to extend the forbearance agreement beyond the initial forbearance period or agree on any amendments to the loan agreement including any revised covenants due to its current noncompliance. The default interest rate associated with any forbearance agreement is 6%, which is in addition to the aggregate per annum interest rate described above. The Company will need to raise additional capital to rectify the noncompliance. No assurance can be given that the Company will be able to raise sufficient capital on timely basis.

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 ("First Draw"). Interest on the initial \$1.0 million term loan was fixed at 9.75%. 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, and the Company borrowed the entire amount on June 17, 2014. The revolving line had a thirty-three month term. The Amendment reduced the future amount potentially available for the Company to borrow under the PFG Loan agreement from \$1.0 million to \$500,000. The interest on the PFG revolving credit line was fixed, calculated daily at a rate of 12.50% per annum. The Company as of September 30, 2017, and March 25, 2017 had fully repaid both the \$1.0 million term loan and the \$500,000 revolving credit line.

In connection with the March 2014 loan agreement, the Company issued warrants convertible into 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, and 80,000 became exercisable with the First Amendment. Each warrant issued under the loan agreement has a term of five years and an exercise price of \$1.42 which was equal to the average NASDAQ closing price of the Company's common stock for the ten trading days prior to the First Draw.

If the warrants are not exercised before expiration on March 31, 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 Company currently has no definitive plans for any of the aforementioned events, and as a result, the cash payment date is estimated to be the expiration date unless warrants are exercised before then. The warrants have the characteristics of both debt and equity and are accounted for as a derivative liability measured at fair value each reporting period with the change in fair value recorded in earnings.

As of September 30, 2017, the estimated fair values of the derivative liabilities associated with the warrants issued in connection with the First Draw and Amendment were \$97,000 and \$65,000, respectively, for a combined value of \$162,000. 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. During the three and six-month periods ended September 30, 2017, the change in the fair value of the warrant liability totaled \$60,000, respectively. During the three and six-month periods ended September 24, 2016, the change in the fair value of the warrant liability totaled \$28,000 and \$74,000 respectively. These changes are reported in the accompanying statement of operations as a gain on adjustment of warrant liability to fair value. There was no accretion recorded in the second quarter or first half of fiscal 2018 in connection with the March 2014 loan agreement as the loan was paid in full. During the three and six month periods ended September 24, 2016, the Company recorded accretion discount expense associated with the March 2014 loan of \$7,000 and \$18,000, respectively.

## **(8) — 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.

Fair value measurements discussed herein are based upon certain market assumptions and pertinent information available to management as of and during the three and six months period ended September 30, 2017. The carrying values of cash and cash equivalents, trade accounts receivable, line of credit, term debt and accounts payable approximate their fair values given their short-term nature. As of September 30, 2017, the carrying value of the outstanding PFG loan approximates the estimated aggregate fair value, since the embedded equity forward is recognized at 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.

*Derivatives* The Company does not use derivative instruments to hedge exposures to cash flow, market, or foreign currency risks. The Company evaluates all of its financial instruments, including notes payable, to determine if such instruments are derivatives or contain features that qualify as embedded derivatives. The Company accounts for certain of its warrants as derivatives. Changes in fair values are reported in earnings as gain or loss on adjustment of warrant liability to fair value.

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 balance sheet.

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. The derivative warrant liability is valued using a Monte Carlo simulation model, which used the following assumptions as of September 30, 2017: (i) the remaining expected life of 1.5 years, (ii) the Company's historical volatility rate of 66.5%, (iii) risk-free interest rate of 1.39%, and (iv) a discount rate of thirty percent.

The aforementioned derivative 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 follows:

**Fair Value Measurements as of September 30, 2017**

**(In Thousands):**

	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>
Warrant liability	\$ —	\$ —	\$ 162
Equity forward		— 36	—
Total	\$ —	\$ 36	\$ 162

**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 three and six-month periods ended September 30, 2017 and March 25, 2017.

The table below summarizes changes in gains and losses recorded in earnings for Level 3 assets and liabilities that are still held at September 30, 2017:

<b>(In thousands)</b>	<b>Three Month Periods Ended</b>		<b>Six Month Periods Ended</b>	
	<b>September 30, 2017</b>	<b>September 24, 2016</b>	<b>September 30, 2017</b>	<b>September 24, 2016</b>
Warrant liability at beginning of period	\$ 222	\$ 307	\$ 222	\$ 353
Gains (recorded in other income/expense)	(60 )	(28 )	(60 )	(74 )
Losses (recorded in other income/expense)	—	—	—	—
Warrant liability at end of period	\$ 162	\$ 279	\$ 162	\$ 279

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 September 30, 2017 or March 26, 2016.

The following table presents quantitative information about recurring Level 3 fair value measurements at September 30, 2017 and March 25, 2017:

<b>September 30, 2017</b>	<b>Valuation Technique(s)</b>	<b>Unobservable Input</b>	
Warrant liability	Monte Carlo	Discount rate	30%

<b>March 25, 2017</b>	<b>Valuation Techniques(s)</b>	<b>Unobservable Input</b>	
Warrant liability	Monte Carlo	Discount rate	24%

The discount rate of thirty percent at September 30, 2017, and twenty four percent at March 25, 2017 is management's estimate of the current cost of capital given the Company's credit worthiness. A significant increase in the discount rate would significantly decrease the fair value, but the magnitude of this decrease would be less significant in a scenario where the Company's stock price is significantly higher than the exercise price since the holder's option to take a cash payment at maturity represents a smaller component of the total fair value when the Company's stock price is higher. 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.

**( 9 ) — 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:

	<b>Quarter Ended</b>
<b>(In thousands)</b>	<b>June 25, 2016</b>
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 the three and six months periods ended September 30, 2017. During the three and six months periods ended September 24, 2016, the Switch product line accounted for approximately \$960,000 and \$2.1 million in product revenue, respectively. There was no margin associated with the sales during the three-month periods ended September 24, 2016, as the revenues were primarily attributable to inventory transferred at book value to Astronics, in accordance with the Asset Purchase Agreement. Gross margins of the Switch product line for the six-month periods ended September 24, 2016 was \$437,000. 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 operation 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. 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 has 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 have 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 fiscal 2017, the Company received \$750,000 from Spanawave under the agreement. 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 is included in deferred liability related to asset sales in the consolidated balance sheet. 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. No gain was recognized in connection with these product line sales because of the aforementioned dispute, however as a result of the settlement of the dispute in October 2017 as set forth above (see also Note 17, Subsequent Events), the Company will recognize the associated gain in the third quarter of fiscal 2018. During the three and six-month periods ended September 30, 2017, these product lines accounted for approximately \$94,000 and \$187,000, respectively. Gross margins were immaterial. These product lines accounted for approximately \$75,000 and \$350,000 in revenue during the three and six-month periods ended September 24, 2016, respectively. 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 operation and cash flows from these product lines.

**(10) 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. The shares used in per share computations are as follows:

	<b>Three Month Periods Ended</b>		<b>Six Month Periods Ended</b>	
	<b>September 30,</b>	<b>September 24,</b>	<b>September 30,</b>	<b>September 24,</b>
	<b>2017</b>	<b>2016</b>	<b>2017</b>	<b>2016</b>
<b>(In thousands except per share data)</b>				
<b>Net loss</b>	\$ (1,081 )	\$ (396 )	\$ (2,339 )	\$ (498 )
Weighted average:				
Common shares outstanding	9,791	9,550	9,754	9,550
Potential common shares	—	—	—	—
Common shares assuming dilution	9,791	9,550	9,754	9,550
Net earnings/ loss per share – basic	\$ (0.11 )	\$ (0.04 )	\$ (0.24 )	\$ (0.05 )
Net earnings/ loss per share – diluted	\$ (0.11 )	\$ (0.04 )	\$ (0.24 )	\$ (0.05 )
Stock options not included in computation that could potentially dilute EPS in the future	1,030	1,335	1,030	1,335
Restricted stock awards not included in computation that could potentially dilute EPS in the future	376	—	376	—
Issuable shares for interest on loan	48	—	48	—
Convertible preferred stock not included in computation that could potentially dilute EPS in the future	1,853	1,853	1,853	1,853
Warrants not included in computation that could potentially dilute EPS in the future	3,737	3,737	3,737	3,737

The exclusion of stock options, restricted stock, convertible preferred stocks and warrants from the computation of diluted earnings per share (EPS) for the three and six-month periods ended September 30, 2017 and September 24, 2016 is a result of the Company's net loss and, therefore, the effect of these instruments would be anti-dilutive.

**(11) Share 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. 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 September 30, 2017, no SAR's have been granted under the option plan. As of September 30, 2017, the total number of shares of common stock available for issuance was 983,177. 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 is estimated on the date of grant using the Black-Scholes-Merton option-pricing model and the following weighted average assumptions:

	<b>Three Month Periods Ended</b>		<b>Six Month Periods Ended</b>		
	<b>September 30, 2017</b>	<b>September 24, 2016</b>	<b>September 30, 2017</b>	<b>September 24, 2016</b>	
Dividend yield	—	None	—	—	
Expected volatility	89.82 %	None	89.82 %	98.95 %	
Risk-free interest rate	1.77 %	None	1.77 %	1.38 %	
Expected term (years)	8.36	None	8.36	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 six-month period ended September 30, 2017 and the fiscal year ended March 25, 2017 is as follows:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms (Years)	Aggregate Intrinsic Value (in thousands)
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	11,000	0.85	9.84	
Exercised	—	—		
Forfeited / Expired	85,500	1.41	5.21	
Outstanding at September 30, 2017	1,030,000	\$ 1.41	5.66	\$ 1
Exercisable at September 30, 2017	800,100	\$ 1.44	5.23	\$ —
At September 30, 2017, expected to vest in the future	152,704	\$ 1.25	8	\$ 1

As of September 30, 2017, there was \$178,000 of total unrecognized compensation cost related to non-vested options. That cost is expected to be recognized over a weighted average period of 2.20 years. There were 63,350 options and 102,650 options that vested during the quarter ended September 30, 2017 and September 24, 2016, respectively. The total grant date fair value of options vested during the quarters ended September 30, 2017 and September 24, 2016 was \$71,000 and \$126,000 respectively. There were 92,850 and 237,700 options that vested during the six-month period ended September 30, 2017 and September 24, 2016, respectively. The total grant date fair value of options vested during the six-month period ended September 30, 2017 and September 24, 2016 was \$104,000 and \$1,000, respectively. No shares were exercised during the three and six-month period ended September 30, 2017 and September 24, 2016. Share based compensation cost recognized in operating results for the three-month periods ended September 30, 2017 and September 24, 2016 totaled \$41,000 and \$79,000, respectively. Share based compensation cost recognized in operating results for the six-month periods ended September 30, 2017 and September 24, 2016 totaled \$78,000 and \$151,000, respectively.

Restricted Stock

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The Company granted 36,000 and 386,450 restricted awards during the second quarter and first half of fiscal 2018, respectively. No restricted awards were granted during the second quarter or first half of 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 September 30, 2017, there was \$191,000 of total unrecognized compensation cost related to non-vested awards. That cost is expected to be recognized over a weighted average period of 1.64 years and will be adjusted for subsequent changes in estimated forfeitures. Compensation cost recognized for the restricted and unrestricted stock awards during the second quarter and first half of fiscal of 2018 was \$31,000 and \$40,000. There was no compensation recognized for the restricted and unrestricted stock awards during the second quarter or first half of fiscal 2017.

A summary of the changes in non-vested restricted stock awards outstanding for the six-month period ended September 30, 2017 and the fiscal year ended March 25, 2017 is as follows:

	Shares	Weighted Average Fair Value
Non-Vested at March 26, 2016	—	\$ —
Granted	44,500	—
Vested	44,500	—
Forfeited or cancelled	—	—
Non-Vested at March 25, 2017	—	\$ —
Granted	386,450	0.80
Vested	—	—
Forfeited or cancelled	10,000	0.80
Non-Vested at September 30, 2017	376,450	\$ 0.80

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

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

The Giga-tronics Division historically produces 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.

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

The tables below present information for the three and six-month periods ended September 30, 2017 and September 24, 2016.

(In thousands)	Sep. 30, 2017	Three Month Periods Ended		Three Month Periods Ended		
		Assets	Net Sales	Net Income (Loss)	Sep. 24, 2016	Assets
Giga-tronics Division	\$5,768	\$442	\$(1,773 )	\$8,423	\$1,697	\$(1,410 )
Microsource	2,714	1,800	692	3,364	2,696	1,014
Total	\$8,482	\$2,242	\$(1,081 )	\$11,787	\$4,393	\$(396 )

(In thousands)	Sep. 30, 2017	Six Month Periods Ended			Six Month Periods Ended		
		Assets	Net Sales	Net Income (Loss)	Sep. 24, 2016	Assets	Net Sales
Giga-tronics Division	\$5,768	\$739	\$(3,622 )	\$8,423	\$3,822	\$(1,964 )	
Microsource	2,714	3,494	1,283	3,364	4,013	1,466	
Total	\$8,482	\$4,233	\$(2,339 )	\$11,787	\$7,835	\$(498 )	



During the second quarter of fiscal 2018, two customers accounted for approximately 73% of the Company's consolidated revenues. One of the customers accounted for 38% of the Company's consolidated revenue and was included in the Microsource segment. A second customer accounted for 34% of the Company's consolidated revenue and was also included in the Microsource segment. During the second quarter of fiscal 2017, two customers accounted for 60% of the Company's consolidated revenues. One of the customers accounted for 35% of the Company's consolidated revenue and was included in the Microsource segment. A second customer accounted for 25% of the Company's consolidated revenue and was also included in the Microsource segment. A third customer accounted for 22% of the Company's consolidated revenue and was primarily included in the Giga-tronics Division.

During the first half of fiscal 2018, one customer accounted for 41% of the Company's consolidated revenues and was primarily included in the Microsource segment. A second customer accounted for 36% of the Company's consolidated revenue and was also included in the Microsource segment. During the first half of fiscal 2017, one customer accounted for 33% of the Company's consolidated revenues and was primarily included in the Microsource segment. A second customer accounted for 16% of the Company's consolidated revenue and was also included in the Microsource segment. A third customer accounted for 12% of the Company's consolidated revenue and was primarily included in the Gigatronics Division.

### **(13) 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 \$2,000 tax expense for the three and six-month periods ended September 30, 2017 and September 24, 2016. The effective tax rate for the three and six-month periods ended September 30, 2017 and September 24, 2016 was 0%, primarily due to a valuation allowance recorded against the net deferred tax asset balance.

As of September 30, 2017, the Company had recorded \$120,000 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. The Company does have a California Franchise Tax Board audit that is currently in process. The Company is working with the California Franchise Tax Board to resolve all audit issues and does not believe any material taxes, penalties and fees are due. However, as a result of the on-going examination, the Company recorded an estimated associated tax liability of \$45,000 in the first quarter of fiscal 2015.

#### **(14) Warranty Obligations**

The Company records a provision 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 Month Periods Ended</b>		<b>Six Month Periods Ended</b>	
	<b>September 30,</b>	<b>September 24,</b>	<b>September 30,</b>	<b>September 24,</b>
<b>(In thousands)</b>				
	<b>2017</b>	<b>2016</b>	<b>2017</b>	<b>2016</b>
Balance at beginning of period	\$91	\$ 60	\$123	\$ 60
Provision, net	203	3	204	115
Warranty costs incurred	(159)	(2)	(192)	(114)
Balance at end of period	\$135	\$ 61	\$135	\$ 61

#### **(15) 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. 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 an increase 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 present information for the periods ended September 30, 2017 and March 25, 2017:

**Preferred Stock as of September 30, 2017 and March 25, 2017**

	Designated	Shares	Shares	Liquidation
	Shares	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
Total	19,500.00	18,533.51	18,533.51	\$ 3,540

**(16) — Private 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.

**(17) — Subsequent Events**

As mentioned in Note 9 above, 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. As part of the settlement, the Company, Spanawave and Liberty Test agreed to dismiss and or withdraw all related complaints, cross-complaints and arbitration claims. As a result of the settlement, the Company will recognize the \$375,000 classified as deferred liability related to asset sale (as of September 30,

2017) as a gain on asset sale in the third quarter of fiscal 2018.

On October 20, 2017, the Company's Board of Directors approved resolutions authorizing the Company to initiate delisting from the Nasdaq Stock Market. The decision to withdraw its listing from NASDAQ was taken following the Company's review and consideration of several factors including the likelihood of ongoing non-compliance with the NASDAQ listing requirements. The Board of Directors determined that the Company was unlikely to satisfy the requirements for a minimum share price of \$1.00 and a minimum shareholders' equity of \$2,500,000 by the deadline of October 31, 2017, previously imposed by Nasdaq panel and that an orderly transition to the OTCQB was in the best interests of the Company and its shareholders. The Company notified the NASDAQ stock market of its intention to withdraw its ongoing appeal. The last trading day on the NASDAQ was October 27, 2017. The Company started trading its common stock on the OTCQB Market beginning October 30, 2017 under the ticker symbol GIGA.

## **ITEM 2 - MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

The forward-looking statements included in this report including, without limitation, statements containing the words "believes", "anticipates", "estimates", "expects", "intends" and words of similar import, which reflect management's best judgment based on factors currently known, involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of a number of factors, including but not limited to those listed in Giga-tronics' Annual Report on Form 10-K for the fiscal year ended March 25, 2017 Part I, under the heading "Risk Factors", and Part II, under the heading "Management's Discussion and Analysis of Financial Conditions and Results of Operations".

### **Company Overview**

We produce an Advanced Signal Generator (ASG) for the electronic warfare market and YIG (Yttrium, Iron, Garnet) RADAR filters used in fighter jet aircraft. We have two reporting segments: Giga-tronics Division and Microsource.

The Giga-tronics Division over the past 35 years has 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. Giga-tronics has recently completed a move within the test and measurement market from its legacy products to the newly developed ASG product. As part of this evolution certain legacy product lines were sold to raise additional capital. For example, we sold our SCPM product line to Teradyne in 2013, and in December of 2015, Giga-tronics entered into an agreement with Spanawave to sell its Power Meters, Amplifiers, and Legacy Signal Generators product lines (see Note 9, Sale of Product Lines). In June of 2016, Giga-tronics sold its Switch product line to Astronics (see Note 9, Sale of Product Lines). With the disposition of these legacy product lines, the Giga-tronics Division is solely focused on the ASG product in the test and measurement equipment market.

Microsource primarily develops and manufactures YIG RADAR filters used in fighter jet aircraft for two prime contractors. The Microsource YIG RADAR filters provide us with long term production and development contracts with strong gross margins.

The ASG has the potential to significantly grow product sales and achieve strong gross margins. However, Giga-tronics has experienced significant delays developing, manufacturing and receiving ASG customer orders. The ASG is the most technically complex and advanced product Giga-tronics has developed and manufactured, and we have experienced delays in bringing the product to market and efficiently manufacturing it. It is also priced significantly higher than any other Giga-tronics product, and we have experienced longer than anticipated procurement cycles in the electronic warfare market it services. The delays in the development and manufacturing of the ASG, along with the longer than anticipated procurement cycles, have significantly contributed to the increased

operating losses in the first half of fiscal 2018 and prior years. Giga-tronics could experience similar losses in the current fiscal year if there are further delays in ASG features currently being developed, manufacturing efficiencies are not achieved, and customer orders are delayed. To bring the ASG to its full potential, Giga-tronics will be required to seek additional working capital, however, there are no assurances that such working capital will be available, or on terms acceptable to the Company.

### **Significant Orders**

Both the Giga-tronics Division and Microsource receive large customer orders each year. The timing of orders, and any associated milestone achievement, causes 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:

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 an aircraft platform. Of this NRE service order, we delivered approximately \$304,000 in services during the second quarter ended September 30, 2017, and we expect to finish delivering such services in the second half of fiscal 2018.

In March 2017, Microsource received a \$404,000 YIG RADAR filter order from one of our customers. We started shipping this order in the second quarter of fiscal 2018.

Also in July 2017, Microsource received an additional \$471,000 YIG RADAR filter order from one of our customers. We expect to fulfil this order in the second half of fiscal 2018.

In July 2017, the Giga-tronics Division received a follow on \$1.7 million order from the United States Navy for our Real-Time Threat Emulation System (TEmS) which is a combination of the ASG hardware platform, along with software developed and licensed to the Company from a major Aerospace and Defense Company. We expect to fulfil this order in the second quarter of fiscal 2018.

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 June 2016, the Giga-tronics Division received a \$3.3 million order from the United States Navy for our Real-Time Threat Emulation System (TEmS) which is a combination of the ASG hardware platform, along with software developed and licensed to the Company from a major Aerospace and Defense Company. The complete order included ASG 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 Navy order during the fourth quarter of fiscal 2017. An additional order for \$542,000 was received in July 2016 from the United States Navy for our ASG hardware only platform. We also fulfilled the \$542,000 order in fiscal 2017.

In fiscal 2015, Microsource received a \$6.5 million order (“NRE Order”) for non-recurring engineering and for delivery of a limited number of flight-qualified prototype hardware from a second prime defense contractor to develop a variant of our high performance fast tuning YIG RADAR filters for an aircraft platform. In fiscal 2016 our Microsource business unit also finalized an associated multiyear \$10.0 million YIG production order (“YIG Production Order”). The Company started shipping the YIG Production Order in the second quarter of fiscal 2017, and anticipates shipping it through fiscal 2020.

### **Critical Accounting Policies**

Please refer to the section of the Company’s Annual Report on Form 10-K for the year ended March 25, 2017 entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations —Critical Accounting Policies” for a discussion of our critical accounting policies. During the three and six months ended September 30, 2017, there were no material changes to these policies other than as disclosed in Note 1 Organization and Significant Accounting Policies.

In preparing the consolidated financial statements, management is required to make estimates based on the information available that affect the reported amounts of assets and liabilities as of the balance sheet dates and revenues and expenses for the reporting periods. While we believe that these accounting policies and estimates are based on sound measurement criteria, actual future events can and often do result in outcomes that can be materially different from these estimates and forecasts.

### **Results of Operations**

New orders received by segment are as follows:

#### **NEW ORDERS**



(Dollars in thousands)	Three Month Periods Ended			
	September 30,	September 24,	% change	
	2017	2016		
Giga-tronics Division	\$ 1,768	\$ 1,412	25	%
Microsource	5,620	2,566	119	%
Total	\$ 7,388	\$ 3,978	86	%

(Dollars in thousands)	Six Month Periods Ended			
	September 30,	September 24,	% change	
	2017	2016		
Giga-tronics Division	\$ 1,746	\$ 6,141	(72%	)
Microsource	5,637	7,109	(21%	)
Total	\$ 7,383	\$ 13,250	(44%	)

New orders received in the second quarter of fiscal 2018 increased by 86% to \$7.4 million from the \$4.0 million received in the second quarter of fiscal 2017. The Giga-tronics Division saw a \$356,000 or 25% increase in orders due to the \$1.7 million order from the US Navy associated with the Company's ASG product. The Microsource business unit saw a \$3.0 million or 119% increase primarily due to the receipt of a \$4.8 million order in comparison to the \$1.9 million non-recurring engineering order received in the second quarter of fiscal 2017.

New orders received in the first half of fiscal 2018 decreased by 44% to \$7.4 million from the \$13.3 million received in the first half of fiscal 2017. The Giga-tronics Division saw a \$4.4 million or 72% decrease in orders primarily due to lower bookings associated with the ASG product. The Company received a \$1.7 million order in comparison to the larger \$3.8 million order received from the US Navy in the prior period. The Microsource business unit saw a \$1.5 million or 21% decrease in the first half of fiscal 2018. Orders totaling \$5.6 million was received in the first half of fiscal 2018 in comparison to the \$4.5 million order for YIG RADAR filters and the \$1.9 million non-recurring engineering order received in the first half of fiscal 2017.

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

## BACKLOG

(Dollars in thousands)	September 30, 2017	September 24, 2016	% change
Backlog of unfilled orders at end of period:			
Giga-tronics Division	\$ 1,770	\$ 3,576	(51% )
Microsource	12,744	14,376	(11% )
Total	\$ 14,514	\$ 17,952	(19% )
Backlog of unfilled orders shippable within one year:			
Giga-tronics Division	\$ 1,770	\$ 3,576	(51% )
Microsource	5,464	6548	(17% )
Total	\$ 7,234	\$ 10,124	(29% )

Backlog at the end of the second quarter of fiscal 2018 decreased 19% compared to the same period end in the prior year. The Giga-tronics Division saw a 51% decrease in backlog primarily due to the lower ASG orders discussed above. Microsource saw an 11% decrease in backlog in the second quarter of fiscal 2018 as the Company started fulfilling the \$10.0 million YIG production order and the \$1.9 million nonrecurring order. Backlog also decreased as the size of the new orders received was smaller in comparison to the \$4.5 million YIG production Order and the \$1.9 million non-recurring engineering order received in the prior period. The \$4.5 million Production Order included in the backlog at September 2016 was fulfilled throughout fiscal 2017 and completed in the second quarter of fiscal 2018. Continuation of the decreased level of new ASG orders and the decrease in backlog would have a material adverse effect on the Company's revenues, financial condition and its ability to continue as a going concern.

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

## ALLOCATION OF NET SALES

(Dollars in thousands)	Three Month Periods Ended		
	September 30, 2017	September 24, 2016	% change
Giga-tronics Division	\$442	\$ 1,697	(74% )
Microsource	1,800	2,696	(33% )
Total	\$2,242	\$ 4,393	(49% )

(Dollars in thousands)	Six Month Periods		
	Ended		
	September 30, 2017	September 24, 2016	% change
Giga-tronics Division	\$ 739	\$ 3,822	(81% )
Microsource	3,494	4,013	(13% )
Total	\$4,233	\$ 7,835	(46% )

Net sales in the second quarter of fiscal 2018 were \$2.2 million, a 49% decrease from the \$4.4 million in fiscal 2017. Net sales for the Giga-tronics Division decreased by \$1.3 million or 74% primarily due to lower sales associated with the legacy products sold to Astronics and a decrease associated with the Company's new ASG product. Net sales for Microsource decreased by \$896,000 or 33% primarily due to the winding down of non-recurring engineering services as well as lower product revenues as the Company fulfilled the \$4.5 million order for YIG RADAR filters.

Net sales in the first half of fiscal 2018 decreased 46% to \$4.2 million from the \$7.8 million in the first half of fiscal 2017. Net sales for the Giga-tronics Division decreased by \$3.1 million or 81% primarily due to the decrease in sales associated the legacy products sold to Astronics, and the decrease in sales associated with the Company's new ASG product as discussed above. Net sales for Microsource decreased by \$519,000 or 13% primarily due to milestone revenues associated with the winding down of the NRE Order as discussed above.

Gross margin was as follows for the periods shown:

#### GROSS MARGIN

(Dollars in thousands)	Three Month		
	Periods Ended		
	September 30, 2017	September 24, 2016	% change
Gross Margin	\$487	\$ 1,230	(60% )

(Dollars in thousands)	Six Month		
	Periods Ended		
	September 30, 2017	September 24, 2017	% change
Gross Margin	\$953	\$ 2,155	(56% )

Gross margin decreased in the second quarter of fiscal 2018 to \$487,000 from \$1.2 million for the second quarter of fiscal 2017. The decrease was due to the decrease in net sales. For the first six months of fiscal 2018, gross margin decreased to \$953,000 from \$2.1 million for the second quarter of fiscal 2017. The decrease was primarily due to the decrease in net sales as well unabsorbed factory overhead variances due to fewer product shipments.

Operating expenses were as follows for the periods shown:

### OPERATING EXPENSES

(Dollars in thousands)	Three Month Periods Ended		% change
	September 30, 2017	September 24, 2016	
Engineering	\$409	\$ 567	(28 )%
Selling, general and administrative	1,096	1,047	5 %
Total	\$1,505	\$ 1,614	(7 )%

(Dollars in thousands)	Six Month Periods Ended		% change
	September 30, 2017	September 24, 2016	
Engineering	\$861	\$ 1,097	(22 )%
Selling, general and administrative	2,267	2,352	(4 )%
Total	\$3,128	\$ 3,449	(9 )%

Total operating expenses decreased 7% or \$109,000 in the second quarter of fiscal 2018 over fiscal 2017. Engineering expenses decreased \$158,000 or 28% during the second quarter of fiscal 2018 compared to the same prior year period primarily due to fewer development hours associated with ASG (as the ASG product moved into production in the second half of fiscal 2016).

Selling, general and administrative expenses increased slightly compared to the second quarter of fiscal 2017 primarily due to international sales representative commissions as well as management consulting efforts associated with the Company's ASG product.

Total operating expenses decreased 9% or \$321,000 in the first half of fiscal 2018 over fiscal 2017. Engineering expenses decreased \$236,000 or 22% primarily due to a decrease in development hours associated with ASG as described above and a decrease in personnel related expenses, due to the sale of the Switch product line.

Selling, general and administrative decreased slightly by \$85,000 or 4% primarily due to a decrease in personnel related costs.

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

On June 20, 2016, the Company entered into an Asset Purchase agreement for the sale of its Switch product line to Astronics. Upon signing the agreement, Astronics paid \$850,000 to the Company 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 gain is included in the accompanying consolidated financial statements. During the three and six -month periods ended September 30, 2017, there was no revenue associated with Switch sales. During the three and six month periods ended September 24, 2016, net Switch sales were \$982,000 and \$2.1 million, respectively (see Note 9, Sale of Product Lines).

### **Derivative Liability**

The Company recorded a gain of \$60,000, in the three and six month periods ended September 30, 2017, respectively, related to revaluation of the derivative liability associated with warrants issued with the PFG loan (see Note 7, Term Loan, Revolving Line of Credit and Warrants). The Company recorded a gain of \$28,000 and \$74,000 in the three and six month periods ended September 24, 2016, respectively, related to revaluation of the derivative liability associated with warrants issued with the PFG loan.

### **Interest Expense**

Net interest expense in the second quarter of fiscal 2017 was \$121,000, an increase of \$83,000 over the second quarter of fiscal 2017. Interest expense increased primarily due to the new PFG loan. For the second quarter of fiscal 2018, interest expense included \$33,000 of accretion of discounts on the PFG loan compared to \$7,000 recorded in the second quarter of fiscal 2017. Net interest expense in the first half of fiscal 2017 was \$222,000, an increase of \$144,000 over the first half of fiscal 2017. For the first half of fiscal 2018, interest expense included \$55,000 of accretion of discounts on the PFG loan compared to \$18,000 recorded in the first half of fiscal 2017 (see Note 7, Term Loan, Revolving Line of Credit and Warrants).



## Net Loss

Net loss for the second quarter of fiscal 2018 was \$1.1 million, compared to a net loss of \$396,000 recorded in the second quarter of fiscal 2017. The increase in net loss was primarily due to the lower net sales in the current period in comparison to the same prior year period as discussed above. Net loss for the first half of fiscal 2018 was \$2.3 million, compared to a net loss of \$498,000 recorded in the first half of fiscal 2017. The increase in net loss was primarily due to the lower net sales discussed above. Net loss was also higher in the first half of fiscal 2018 in comparison to the prior period as the net loss recorded in the first half of fiscal 2017 included a \$802,000 gain recorded associated with the sale of the Switch product line in the first quarter of fiscal 2017.

## Financial Condition and Liquidity

As of September 30, 2017, Giga-tronics had \$542,000 in cash and cash equivalents, compared to \$1.4 million as of March 25, 2017. The Company had negative working capital at September 30, 2017 compared to \$620,000 at March 25, 2017. The current ratio (current assets divided by current liabilities) at September 30, 2017 was 0.85 compared to 1.09 at March 25, 2017. The decrease in working capital is primarily due to declining revenues and resulting net losses during fiscal 2018.

## Cash Flows

A summary of our net cash provided by (used in) operating activities from operations, investing activities, and financing activities from our condensed consolidated statements of cash flows is as follows:

	<b>Six Months Ended</b>	
	<b>September</b>	<b>September</b>
	<b>30,</b>	<b>24, 2016</b>
	<b>2017</b>	
Net cash (used in) provided by operating activities	\$(1,600)	\$ 458
Net cash (used in) provided by investing activities	(681 )	820
Net cash provided by (used in) financing activities	1,402	(281 )

During the six months ended September 30, 2017, our operating activities used cash of \$1.6 million, primarily resulting from our net losses and changes in our working capital accounts, adjusted for non-cash items including stock

based compensation and depreciation and amortization.

During the six month period ended September 24, 2016, cash provided by operating activities was \$458,000, primarily due to an increase of \$2.6 million in deferred revenue due to advance payment arrangements for raw materials for our customers, which was partially offset by our net loss.

Cash used in investing activities for the six-month period ended September 30, 2017 was \$681,000, primarily for leasehold improvements in conjunction with the Company's facility relocation to Dublin, California.

Cash provided by investing activities was \$820,000 for the six month period ended September 24, 2016. Cash provided by investing activities in the first half of fiscal 2017 resulted primarily from a cash payment from Astronics of \$850,000 pertaining to the sale of our Switch product line as well as a cash payment from Spanawave of \$375,000 pertaining to the sale of our legacy product lines. The cash payments were offset by additions to property and equipment of \$30,000 in the first half of fiscal 2017. The additions in the first half of fiscal 2017 were associated with equipment required to manufacture the ASG.

Cash provided by financing activities for the six month period ended September 30, 2017 was \$1.4 million, primarily due to proceeds from the new term loan with PFG.

Cash used in financing activities for the six month period ended September 24, 2016 was \$281,000, primarily due to the repayment of the Company's previous term loan with PFG.

The Company incurred net losses of \$1.1 million for the second quarter and \$2.3 million for the first half of fiscal 2018. These losses have contributed to an accumulated deficit of \$27.9 million as of September 30, 2017. The Company has also experienced delays in the development or refinement of features, receipt of orders, and shipments for the new ASG. These delays have contributed, in part, to a decrease in working capital.

The new ASG product has shipped to several customers, but potential delays in the development of features, longer than anticipated sales cycles, or uncertainty as to the Company's ability to efficiently manufacture the ASG, 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 September 30, 2017, the line of credit had a balance of \$552,000.

On April 27, 2017, the Company entered into a new loan agreement with PFG. Under the terms of the agreement, PFG made a term loan to the Company in the principal amount of \$1,500,000, with funding occurring on April 28, 2017. The loan has a two-year term, with interest only payments for the term of the loan. However, as of June 24, 2017 and September 30, 2017, the Company was not in compliance with the loan's revenue and shareholders' equity covenants. On August 2, 2017, the Company and PFG entered into a short-term forbearance arrangement with respect to such noncompliance which expired on October 15, 2017. The Company is continuing to work with PFG to extend the previous agreed upon forbearance agreement, however, no assurance can be given that the Company will be able to extend the forbearance agreement beyond the initial forbearance period or agree on any amendments to the loan agreement including any revised covenants due to its current noncompliance. The default interest rate associated with any forbearance agreement is 6%, which is in addition to the loan's aggregate per annum interest rate of 16%. The Company will need to raise additional capital to rectify the noncompliance. No assurance can be given that the Company will be able to raise sufficient capital on timely basis.

These matters raise substantial doubt as to the Company's ability to continue as a going concern. To address these matters, our management team has taken several actions which are described in Note 2 (Going Concern and Management's Plan) above to provide additional liquidity and reduce costs and expenses going forward.

Management will continue to review all aspects of the business 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 through debt, equity financing or possible product line sales, however there are no assurances that such financings or sales will be available at all, or on terms acceptable to the Company.

The Company's historical operating results and forecasting uncertainties indicate that substantial doubt exists related to the Company's ability to continue as a going concern. Forecasting uncertainties exist with respect to the ASG 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 the Company's 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.

**ITEM 3 - QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

Pursuant to Item 305 of Regulation S-K, the Company, as a smaller reporting company, is not required to provide the information required by this item.

**ITEM 4 - CONTROLS AND PROCEDURES**

The Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Co-Chief Executive Officers and Principal Accounting & Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures as of September 30, 2017, which is the end of the fiscal quarter covered by this report. Based upon that evaluation, the Co-Chief Executive Officers and Principle Accounting & Financial Officer concluded that the Company's disclosure controls and procedures are effective to provide reasonable assurances that (i) the information the Company is required to disclose in the reports it files or submits under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time period required by the Commission's rules and forms, and (ii) such information is accumulated and communicated to our management, including our Co-Chief Executive Officers and Principal Accounting & Financial Officer, as appropriate to allow timely decisions regarding required disclosures.

There were no significant changes in the Company's internal control over financial reporting during the period covered by this report that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting.

**II - OTHER INFORMATION**

**ITEM 1 - LEGAL PROCEEDINGS**

As of September 30, 2017, the Company has no material pending legal proceedings. From time to time, the Company is involved in various disputes and litigation matters that arise in the ordinary course of business.

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 dated December 15, 2015 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. As part of the settlement, the Company, Spanawave and Liberty Test agreed to dismiss and or withdraw all related complaints, cross-complaints and arbitration claims.

### **ITEM 1A - RISK FACTORS**

There has been no material change in the risk factors disclosed in the registrant's Annual Report on Form 10-K for the fiscal year ended March 24, 2017, except (i) with respect to the matter reported in Item 3, Defaults Upon Senior Securities, below and (ii) a continuing decrease in the Company's cash flow and liquidity, which increases the level of doubt as to the Company's ability to continue as a going concern.

### **ITEM 2 - UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS**

None.

### **ITEM 3 - DEFAULTS UPON SENIOR SECURITIES**

On April 27, 2017, the Company entered into a new loan agreement with PFG. Under the terms of the agreement, PFG made a term loan to the Company in the principal amount of \$1,500,000. As of September 30, 2017, the Company was not in compliance with the loan's revenue and shareholders' equity covenants. On August 2, 2017, the Company and PFG entered into a short-term forbearance arrangement with respect to such noncompliance, which expired on October 15, 2017. The Company is continuing to work with PFG to extend the previous agreed upon forbearance agreement however, no assurance can be given that the Company will be able to extend the forbearance agreement beyond the initial forbearance period or agree on any amendments to the loan agreement including any revised covenants due to its current noncompliance. The default interest rate associated with any forbearance agreement is 6%, which is in addition to the aggregate per annum interest rate described in Note 7. The Company will need to raise additional capital to rectify the noncompliance. No assurance can be given that the Company will be able to raise sufficient capital on a timely basis.

The Company maintains 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. 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 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 at September 30, 2017, because of the PFG noncompliance described above.

**ITEM 4 - MINE SAFETY DISCLOSURES**

Not applicable.

**ITEM 5 - OTHER INFORMATION**

None.

**ITEM 6 - EXHIBITS**

- 31.1 Certification of Co-Chief Executive Officers pursuant to Section 302 of Sarbanes-Oxley Act.
- 31.2 Certification of Principal Accounting & Financial Officer pursuant to Section 302 of Sarbanes-Oxley Act.
- 32.1 Certification of Co-Chief Executive Officer pursuant to Section 906 of Sarbanes-Oxley Act.
- 32.2 Certification of Principal Accounting & Financial Officer pursuant to Section 906 of Sarbanes-Oxley Act.
- 101.INS\*\* XBRL Instance
- 101.SCH\*\* XBRL Taxonomy Extension Schema
- 101.CAL\*\* XBRL Taxonomy Extension Calculation
- 101.DEF\*\* XBRL Taxonomy Extension Definition
- 101.LAB\*\* XBRL Taxonomy Extension Labels
- 101.PRE\*\* XBRL Taxonomy Extension Presentation

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**SIGNATURES**

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

GIGA-TRONICS  
INCORPORATED  
(Registrant)

By:

Date: November 14, 2017 /s/ John R. Regazzi  
John R. Regazzi  
Co-Chief Executive Officer  
(Principal Executive Officer)

Date: November 14, 2017 /s/ Suresh Nair  
Suresh Nair  
Co-Chief Executive Officer

Date: November 14, 2017 /s/ Temi Oduozor  
Temi Oduozor  
Corporate Controller &  
Principal Accounting &  
Financial Officer