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

FORM 10-K

ANNUAL REPORT PUR For the fiscal year ended 1	SUANT TO SECTION 13 OR 15(d) OF TH March 28, 2020	IE SECURITIES EXC	CHANGE ACT OF 1934
TRANSITION REPORT For the transition period from	PURSUANT TO SECTION 13 OR 15(d) Omto	Or F THE SECURITIES	EXCHANGE ACT OF 1934
	Commission	File No. <u>001-14605</u>	
	GIGA-TRONIC	CS INCORPORAT	TED
	(Exact name of regist	rant as specified in its cl	harter)
	lifornia		94-2656341
(State or other jurisdiction	of incorporation or organization)		(I.R.S. Employer Identification No.)
	Drive, Dublin, CA ipal executive offices)		94568 (Zip Code)
(Address of princ			
	Registrant's telephone number,	, including area code: (9)	<u>(25) 328-4650</u>
Securities registered pursuant to Sec Title of each class		vmhol(s)	Name of each exchange on which registered
Common Stock, No par value	<u>Trading S</u> GIO		OTCQB Market
	Securities registered pursua	nt to Section 12(g) of th	ne Act: None.
Indicate by check mark if the registr	ant is a well-known seasoned issuer, as defined	d in Rule 405 of the Sec	curities Act. Yes □ No ⊠
	ant is not required to file reports pursuant to So		
Indicate by check mark whether the	e 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 d (2) has been subject to such filing requirements for the past 90
Indicate by check mark whether the (§232.405 of this chapter) during the	registrant has submitted electronically every preceding 12 months (or for such shorter peri	Interactive Data File red od that the registrant wa	equired to be submitted pursuant to Rule 405 of Regulation S-T as required to submit such files). Yes \boxtimes No \square
			not contained herein, and will not be contained, to the best of of this Form 10-K or any amendment to this Form 10-K. ⊠
Indicate by check mark whether the company. See the definitions of "I Exchange Act.:	registrant is a large accelerated filer, an accel arge accelerated filer," "accelerated filer," "s	lerated filer, a non-accel smaller reporting comp	lerated filer, smaller reporting company, or an emerging growth pany," and "emerging growth company" in Rule 12b-2 of the
Large accelerated filer			ccelerated filer
Non-accelerated filer			maller reporting company merging growth company
	dicate by check mark if the registrant has ele ded pursuant to Section 13(a) of the Exchange		tended transition period for complying with any new or revised
Indicate by check mark whether the	registrant is a shell company (as defined in Ex	change Act Rule 12b-2)). Yes □ No ⊠
	g and non-voting common equity held by non- nd asked prices as of September 28, 2019 was		ant computed by reference to the price at which the common
There were a total of 2,625,856 shar	es of the Registrant's Common Stock outstand	ling as of May 20, 2020.	
DOCUMENTS INCORPORATED Portions of the following documents	BY REFERENCE have been incorporated by reference into the p	parts indicated:	
	OCUMENT		
	egistrant's proxy statement for its 2020 Annua ear ended March 28, 2020.	al Meeting of Sharehold	ers to be filed no later than 120 days after the close of the fiscal

TABLE OF CONTENTS

		Page
	PART I	
ITEM 1.	Business	3
ITEM 1A.	Risk Factors	9
ITEM 1B.	Unresolved Staff Comments	17
ITEM 2.	Properties	17
ITEM 3.	Legal Proceedings	18
ITEM 4.	Mine Safety Disclosures	18
	PART II	
ITEM 5.	Market for Common Equity, Related Shareholder Matters and Issuer Repurchases of Equity Securities	18
ITEM 6.	Selected Financial Data	19
ITEM 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	20
ITEM 7A.	Quantitative and Qualitative Disclosures About Market Risk	27
ITEM 8.	Financial Statements and Supplementary Data	28
	Consolidated Balance Sheets as of March 28, 2020 and March 30, 2019	29
	Consolidated Statements of Operations for the years ended March 28, 2020 and March 30, 2019	30
	Consolidated Statements of Shareholders' Equity for the years ended March 28, 2020 and March 30, 2019	31
	Consolidated Statements of Cash Flows for the years ended March 28, 2020 and March 30, 2019	32
	Notes to Consolidated Financial Statements	33
	Report of Independent Registered Public Accounting Firm	52
ITEM 9.	Changes In and Disagreements With Accountants On Accounting and Financial Disclosure	53
ITEM 9A.	Controls and Procedures	53
ITEM 9B.	Other Information	54
	PART III	
ITEM 10.	Directors, Executive Officers and Corporate Governance	55
ITEM 11.	Executive Compensation	55
ITEM 12.	Security Ownership Of Certain Beneficial Owners and Management and Related Shareholder Matters	55
ITEM 13.	Certain Relationships and Related Transactions, and Director Independence	55
ITEM 14.	Principal Accountant Fees and Services	55
	PART IV	
ITEM 15.	Exhibits and Financial Statements Schedules	56
SIGNATURES	Zamono and I manetal statement solutions	58
	2	

Unless the context otherwise requires, we use the terms "Giga-tronics Incorporated," "Giga-tronics," "we," "us," "the Company" and "our" in this Annual Report on Form 10-K to refer to Giga-tronics Incorporated and its wholly owned subsidiary.

FORWARD-LOOKING INFORMATION

This Annual Report on Form 10-K includes "forward-looking statements" within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including but not limited to certain disclosures contained in Item 1A, "Risk Factors" and Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations". These forward-looking statements include, but are not limited to, statements about our plans, objectives, representations and contentions, and are not historical facts and typically are identified by the use of terms such as "may," "will," "should," "could," "expect," "plan," "anticipate," "believe," "estimate," "predict," "potential," "continue" and similar words, although some forward-looking statements are expressed differently. You should be aware that the forward-looking statements included herein represent management's current judgment and expectations, but our actual results, events and performance could differ materially from those expressed or implied by forward-looking statements. We do not intend to update any of these forward-looking statements or publicly announce the results of any revisions to these forward-looking statements, other than as is required under the federal securities laws.

PART 1

ITEM 1. BUSINESS

General

Giga-tronics Incorporated manufactures specialized electronics equipment for use in both military test and airborne operational applications. Our operations consist of two business segments, those of our wholly owned subsidiary, Microsource Inc. ("Microsource") and those of our Giga-tronics Division. Our Microsource operation designs and manufactures custom microwave products for military airborne applications while the Giga-tronics Division designs and manufactures real time solutions for RADAR / Electronic Warfare (EW) test and deployment in a laboratory setting.

Giga-tronics was incorporated on March 5, 1980. We acquired Microsource on May 18, 1998.

The Company's principal executive offices are located at 5990 Gleason Drive, Dublin, California and our telephone number at that location is (925) 328-4650. Our website address is http://www.gigatronics.com.

Reverse Split

On December 12, 2019, we completed a one-for-fifteen reverse stock split of our common stock. All shares and per share amounts included in this report, including the financial statements, have been adjusted to reflect the effect of the reverse stock split unless otherwise indicated.

Reporting Segments

Our business has two reporting segments: Microsource and the Giga-tronics Division.

Microsource

Microsource primarily develops custom microwave products for use in military airborne applications. Microsource's two largest customers are prime contractors for which we develop and manufacture sophisticated RADAR filters used in fighter aircraft. Revenues from Microsource comprised a majority of our revenues for the fiscal years ended March 28, 2020 and March 30, 2019.

Giga-tronics Division

Our Giga-tronics Division designs, manufactures and markets a family of functional test products and integrates those test products along with third party hardware and software to create full test solutions for the RADAR/EW segment of the defense electronics market. Our RADAR/EW test solutions are used to evaluate and improve the performance of RADAR and EW systems. Giga-tronics Division customers include major defense prime contractors, the United States armed services and research institutes.

Products and Markets

Microsource

Microsource's primary business is the design of custom microwave products as well as the production of microwave components using chip and wire assembly methods. Microsource offers a line of tunable, synthesized Band Reject Filters for solving interference problems in RADAR/EW applications. Electronic attack systems onboard high-performance fighter jets often require RADAR filters to block electromagnetic interference generated by other onboard electronic systems, particularly the aircraft's main RADAR. Our high-speed, tunable notch filters can quickly block interference from both continuous wave and wide bandwidth emissions. Using proprietary driver and phase lock technology, our filters offer tuning speeds that are up to ten times faster than traditional filter designs. We custom design these filters specifically for each application.

While our RADAR filter technology may be used in a variety of operational applications and as components in microwave instruments and devices, Microsource's two largest customers are prime contractors for whom we develop and manufacture RADAR filters used in fighter aircraft. Microsource serves the aftermarket for operational hardware associated with the United States Government's RADAR Modernization Program for prior generation fighter aircraft (i.e., the F/A-18E, F-15D and F-16 jets) to extend their useful lives. These RADAR filters are designed to withstand the rigors of operating under extreme conditions. They must be able to operate while exposed to the shock, vibration, high altitudes and temperature extremes experienced during jet flight without cooling or heating from the aircraft.

Our customers require that Microsource be certified to the stringent AS9100D aerospace quality standard. Microsource routinely maintains a top-quality rating as measured quarterly by its customers and over the years has received multiple "Gold Supplier" awards, as well as a "Supplier of the Year" award from one of our prime customers. The most recent "Gold Supplier" award was received in April of 2019 for delivering consistent product quality and on-time shipments to a customer during 2018.

Microsource's revenues have grown over time as prime contractors began upgrading additional aircraft variants. Initially Microsource supplied filters for one fighter jet, the F/A-18E. During our 2014 fiscal year, the prime contractor added a second aircraft, the F-15. Additionally, during our 2017 fiscal year, a second prime contractor added a third aircraft, the F-16. As a result, Microsource's revenue was \$8.2 million for our fiscal year ended March 28, 2020 as we delivered filters for approximately 100 aircrafts. We believe there are over 3,000 potential domestic and foreign F-15, F-16 and F-18 aircraft that have not been upgraded. Microsource is a sole-source supplier of filters for these three fighter jets and we expect that the business will continue to be a significant source of our future revenue.

Giga-tronics Division

Our Giga-tronics Division designs, manufactures and markets a family of functional test systems for the RADAR and Electronic Warfare (RADAR/EW) segment of the defense electronics market. Our RADAR/EW test systems are used to evaluate and improve the performance of RADAR systems and EW counter measures, such as jammers. Giga-tronics Division customers include major defense prime contractors, the armed services (primarily in the United States) and research institutes.

Our goal is to become a leading supplier of test solutions for evaluating defense RADAR and EW systems. The same digital technology that has revolutionized commercial communications, consumer and automotive electronics is now being applied to advanced RADAR and EW systems. This shift in technology limits the effectiveness of traditional test solutions that are unable to actively interact with the RADAR and EW systems being tested. In contrast to traditional test systems, we specifically architected the Giga-tronics testing platform like a RADAR to offer sophisticated control and real-time behavior that supports active interaction with the devices under test. To our knowledge, no other RADAR/EW test system offers real times responses and closed loop behavior in the same manner as our technology.

Technology Shift in RADAR and EW Systems

Historically, the United States defense electronic systems have embodied the most advanced capabilities available. Major investments in integrated circuits, computing technology and signal processing algorithms made by the United States Defense Department during the 1960s through the 1980s, gave the United States an advantage in its RADAR/EW defensive capabilities. These technologies subsequently found their way into consumer products and services, such as desktop computers, music players and smartphones. The rapid acceleration and global proliferation of these technologies by commercial companies has enabled both United States allies and potential adversaries to take a huge leap forward in RADAR and EW technology.

These advanced digital technologies, along with the standardization of stealth technology, has enabled the United States' potential adversaries to catch-up to, and in some cases surpass, the United States military dominance in the air and at sea. The United States Defense Department recognizes these threats and has requested that the United States Congress divert substantial resources from other programs to fund development of the next generation of RADAR and EW systems¹. These new systems may employ machine learning and artificial intelligence technologies that require new approaches for testing and evaluation, creating a significant market opportunity for Giga-tronics' RADAR/EW testing platform.

The Test Challenge

The Giga-tronics RADAR/EW test system enables users to test RADAR/EW systems by simulating multiple, dynamic RADAR/EW signals that a fighter jet experiences in combat.

There are no defined borders within the electromagnetic spectrum. For example, a fighter jet in a battlefield sees many microwave signals, some friendly, some hostile, some bouncing off mountains, others reflected off the ocean. The fighter jet's on-board jammer must recognize which among all these RADAR signals poses a threat. If the jammer is cognizant of a threat signal, then it will attempt to jam the signal. In turn, the fighter jet which sent out the threat signal has a modern RADAR which is designed to recognize that it is being jammed by an opponent and may adapt to avoid the interference by modifying its RADAR signal. To fully test and evaluate modern cognizant and adaptive RADAR and EW systems in a laboratory setting requires a test system that can duplicate the interplay between these devices. Therefore, evaluating a combat RADAR or EW system requires a means to simulate the changing and reacting signals that exist in combat situations.

Traditional open loop test systems operate by sending a pre-recorded set of signals to the RADAR or EW system under test. Thus, these traditional systems are unable to interact with the new adaptive RADAR/EW systems. Therefore, we believe that prime contractors and government test facilities are seeking new test solutions that deliver a closer correlation between laboratory testing and field testing by better simulating the changing and reacting signals that exist in combat situations.

Giga-tronics' Solution

We designed our Giga-tronics RADAR/EW test system to address this challenge. Our RADAR/EW test system employs a RADAR-like architecture, allowing it to accurately simulate RADAR/EW signals for testing. In addition, our RADAR/EW test system is architected to interact with the system under test by modifying its signals in response to signals generated by the system under test, creating a "closed-loop" testing environment that simulates the behavior of RADAR and EW systems in combat situations. We believe that our Giga-tronics RADAR/EW test system is the first commercial RADAR/EW test system architected to offer this close-loop behavior, which interacts with the system being tested. This closed-loop design also permits our RADAR/EW test system to digitally record the signals generated during testing for later analysis.

We believe our RADAR/EW test solution offers several competitive advantages:

- 1. Our RADAR/EW solution was designed specifically for generating realistic RADAR signals for testing purposes.
- 2. Our RADAR/EW solution was architected to offer real-time, dynamic, closed-loop behavior that can interact with the devices under test for fully evaluating and improving RADAR and EW performance.
- 3. Our RADAR/EW solution features digital processing hardware and firmware, creating a test solution that may be customized with relative ease compared to traditional test systems
- 4. Our RADAR/EW solution is scalable, allowing us to build test systems with multiple channels that scale well both in terms of size and costs compared to traditional systems.

Our Market Strategy

The two primary uses of test equipment within the defense industry are to perform design analysis and verification at the prime contractors and acceptance of the RADAR/EW systems by the United States government.

We chose to focus our initial marketing efforts on the United States armed forces. We believe that government test facilities are relatively open to adopting different test methods and equipment to detect problems during system acceptance compared to prime contractors, who often have preferred suppliers and, in some cases, their own testing systems. Therefore, we focused initial marketing efforts for our RADAR/EW testing solutions on the United States Navy and the United States Air Force, two of the dominant acquirers of EW equipment in the United States. Our RADAR/EW testing system is being used by the United States Navy to test a Northrop Grumman jammer. Through March 28, 2020, this program has provided an aggregate of approximately \$9.0 million in sales with the shipment of five test systems.

¹ DOD Electronic Warfare Strategy, Ashton Carter, 2017

Sources and Availability of Raw Materials and Components

Substantially all the components required by Giga-tronics to make its assemblies are available from more than one source. We occasionally use sole source arrangements to obtain leading-edge technology or favorable pricing or supply terms, but not in any material volume. In our opinion, the loss of any sole source arrangement we have would not be materially adverse to our operations. Some suppliers are also competitors of Giga-tronics. In the event a competitor-supplier chooses not to sell its products to us, production delays could occur as we seek new suppliers or re-design components to our products.

Although extended delays in receipt of components from our suppliers could result in longer product delivery schedules for us, we believe that our protection against this possibility stems from our practices of dealing with well-established suppliers and maintaining good relationships with such suppliers.

Proprietary Technology and Intellectual Property

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

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

We have maintained four non-provisional patents related to our legacy 2500B parametric signal generator product line, which was not among the legacy product lines that have been sold to date. These patents describe advanced synthesis techniques and potentially can be extended for use with the Giga-tronics Advanced Signal Generator & Analyzer ("ASGA") system and to a number of Microsource synthesizer components. In February of 2020, the Company was granted a non-provisional U.S. patent relating to its ASGA system. The patent describes the internal design of the Advanced Signal Generator ("ASG") and Advanced Signal Analyzer ("ASA") along with the architecture of how all the components work together to facilitate building multi-channel test systems with reduced size, weight and cost as compared to present solutions. A second non-provisional patent application filed in December of 2019 describing uses of the ASGA system in high channel-count situations is currently pending before the U.S. patent office.

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

In September 2015, we entered into a software development agreement with a major aerospace and defense company whereby the aerospace company developed and licensed its simulation software to us. The simulation software (also called Open Loop Simulator or OLS technology), which is owned by the aerospace company and licensed to us, allows our ASGA system to coordinate with various third-party hardware elements to generate the signals for testing RADAR/EW equipment. We paid over \$1.2 million in connection with the development of this software and, in addition, we incur a license fee of over \$20,000 per system sold that incorporate this software.

Seasonal Nature of Business

Our business is not seasonal.

Working Capital Practices

We generally strive to maintain adequate levels of inventory and we generally sell to customers on 30-day payment terms in the U.S. and generally allow more time for overseas payments. Typically, we receive payment terms of 30 days from our suppliers. We believe that these practices are consistent with typical industry practices.

Importance of Limited Number of Customers

We are a supplier of RADAR filters for fighter jet aircrafts and RADAR/EW testing solutions to various United States (U.S.) government defense agencies, as well as to their prime contractors. Management anticipates sales to U.S. government agencies and their prime contractors will remain a significant portion of all of our sales in fiscal 2021. U.S. and international defense-related agencies accounted for 99% of net sales in fiscal 2020 and 98% of net sales in fiscal 2019. Commercial business accounted for the remaining 1% of net sales in fiscal 2020 and 2% of net sales in fiscal 2019.

At the Giga-tronics Division, U.S. defense agencies and their prime contractors accounted for 95% and 5% of net sales in fiscal 2020 and 90% and 10% of net sales in fiscal 2019, respectively. Microsource reported 100% and 100% of net sales to prime contractors of U.S. defense agencies in fiscal 2020 and fiscal 2019, respectively.

During fiscal 2020, the Boeing Company accounted for 45% of our consolidated revenues and was included in the Microsource reporting segment. A second customer, Lockheed Martin, accounted for 19% of our consolidated revenues during fiscal 2020 and was also included in the Microsource reporting segment. A third customer, DFAS (DFAS acted as prime contractor for the United States Navy), accounted for 18% of our consolidated revenues during fiscal 2020 and was included in the Giga-tronics Division reporting segment.

During fiscal 2019, the Boeing Company accounted for 57% of our consolidated revenues and was included in the Microsource reporting segment. A second customer, Lockheed Martin, accounted for 26% of our consolidated revenues during fiscal 2019 and was also included in the Microsource reporting segment. A third customer, the United States Navy, accounted for 15% of our consolidated revenues during fiscal 2019 and was included in the Giga-tronics Division reporting segment.

We could experience a material adverse effect on our financial stability if there was a significant loss of either our defense or commercial customers.

Both Microsource and our Giga-tronics Division products are largely dependent on U.S. defense spending and budgets and are subject to expansion and contraction between fiscal year periods. Revenues from Microsource products and services often times span several years with deliveries varying between both interim and annual fiscal year periods. Additionally, the Giga-tronics Division's RADAR/EW testing system is a relatively new product platform with fewer targeted customers and significantly longer sales cycles and greater average selling prices when compared to its prior general-purpose test & measurement equipment product lines. We therefore expect that a major customer in one year may not be a major customer in the following year. Accordingly, our net sales and earnings may vary significantly from one period to the next and will decline if we are unable to find new customers or increase our business with other existing customers to replace declining net sales from the previous year's major customers.

Backlog of Orders

On March 28, 2020, our backlog of unfilled orders was approximately \$6.8 million compared to approximately \$6.7 million at March 30, 2019. Orders for our products include program orders from prime contractors with extended delivery dates. Accordingly, the backlog of orders may vary substantially from year to year and the backlog entering any single fiscal quarter may not be indicative of sales for any period. In addition, the Company now recognizes revenue for certain contracts as it incurs costs, as opposed to when units are delivered and, as a result, our backlog is reduced when such revenue recognition occurs.

Backlog includes only those customer orders for which binding agreement exists, a delivery schedule has been agreed upon between us and our customer and, in the case of U.S. government orders, for which funding has been appropriated.

Competition

The Company primarily competes in two different markets: Microsource's RADAR filters and Giga-tronics RADAR/EW test systems.

Microsource is a sole source supplier serving the aftermarket for operational hardware associated with the U.S. Government's RADAR Modernization Program (RMP) for certain prior generation fighter jet aircrafts (F/A-18E, F-15D and F-16 jets) to extend their useful lives. Our Microsource division supplies RADAR filters specifically designed for military aircrafts to solve an interference problem created when newer, more powerful RADARs are installed on older aircrafts. Over the years, the prime contractors responsible for integrating the new RADARs have flight qualified our filters at considerable expense. Only a few other companies possess the technical know-how to design and manufacture filters of this nature, such as Teledyne and Micro-Lambda Wireless, but we believe the expense of developing and requalifying a new component for these aircraft is prohibitive to the point where the prime contractor would only undertake such an effort if major issues were to arise such as, significant technical deficiencies or if Microsource were unable to deliver products on time.

Microsource has received multiple supplier of the year awards including in April 2019 "The Gold Supplier" award from Boeing, so we believe our sole source position is secure.

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

We have developed a unique architecture to address the RADAR/EW test requirements that are adaptive/cognitive. Testing these new RADAR and jamming (i.e. interference) signals is best solved by a real time, closed loop, dynamic simulation system. We believe our Giga-tronics RADAR/EW architecture presents a paradigm shift providing for a closed loop test capability that is currently unavailable elsewhere. Our competitors often have greater resources in research, development and manufacturing and substantially broader product lines and channels. To compete, we place strong emphasis on maintaining a high degree of technical competence as it relates to the development of new microwave products, are highly selective in establishing technological objectives and focus sales and marketing activities in the selected niche areas that are weakly served or underserved by our competitors. Competitors that make alternative equipment to the Giga-tronics Advanced Signal Generation and Analysis system include ELCOM (a division of Frequency Electronics Inc.), COMSTRON (a division of Cobham Plc) and EWST (a division of Ultra Electronics Plc). Compared to Giga-tronics, these competitors are of comparable size or have small product divisions with more limited product lines. Two larger companies, Northrop Grumman/Amherst and Textron/AAI sell open loop test equipment that competes with the Giga-tronics solutions, albeit at a much higher selling price. We do not believe that either of these suppliers are in a position to offer an adaptive closed loop testing system due to the analog nature of their systems' architectures.

Sales and Marketing

Microsource and the Giga-tronics Division sell their products primarily direct to U.S. defense agencies and their prime defense contractors. The Company primarily relies on its internal sales teams to identify leads and complete sales. It also engages independent sales representatives who are perceived to have expertise with targeted markets or customers.

Product Development

Products of the type manufactured by Giga-tronics historically have had relatively long product life cycles. However, the electronics industry is subject to rapid technological changes at the component level. Our future success is dependent on our ability to steadily incorporate new functionality and advancements in component technologies into our new products. In fiscal 2020 and fiscal 2019, product development expenses totaled approximately \$1.6 million and \$1.3 million, respectively.

Our product development activities have historically been funded internally, through product line sales, or through outside equity investment and debt financing. Product development activities are expensed as incurred.

We expect to continue to make significant investments in research and development. There can be no assurance that future technologies, processes or product developments will not render our current product offerings obsolete or that we will be able to develop and introduce new products or enhancements to existing products that satisfy customer needs in a timely manner or achieve market acceptance. Failure to do so could adversely affect our business.

Manufacturing

The Company assembles and tests Microsource and Giga-tronics Division products at its Dublin, California headquarters facility. Microsource develops and manufactures RADAR filters used in fighter jet aircrafts. Our Giga-tronics Division manufactures a family of functional test products and integrates those test products along with third party hardware and software to create full test solutions for the RADAR/EW segment of the defense electronics market.

Environment

To the best of our knowledge, we are in compliance with all Federal, state and local laws and regulations involving the protection of the environment.

Employees

As of March 28, 2020 and March 30, 2019, we employed 42 and 39 individuals on a full-time basis, respectively. We believe that our future success depends on our ability to attract and retain skilled personnel. None of our employees are represented by a labor union, and we consider our employee relations to be good.

Information about Foreign Operations

We sell to our international customers through a network of foreign technical sales representative organizations. All transactions between us and our international customers are in U.S. dollars.

Geographic Distribution of Net Sales

(Dollars in thousands)	Fiscal	Fiscal	Fiscal	Fiscal
	2020	2019	2020	2019
Domestic	\$ 11,635	\$ 11,054	99%	99%
International	133	94	1%	1%
Total	\$ 11,768	\$ 11,148	100%	100%

See Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 11, Significant Customers and Industry Segment Information for further breakdown of international sales for the last two fiscal years.

ITEM 1A. RISK FACTORS

The outbreak of the novel coronavirus ("COVID-19") has adversely affected our business activities, financial condition and results of operations and may continue to do so

The spread of COVID-19 and the resulting "shelter in place" and "stay at home" orders, travel restrictions and other precautions have caused severe disruptions in the United States economy, which have disrupted our business and may continue to do so. These restrictions and measures and our efforts to act in the best interests of our employees have affected our business and operations by, among other things, causing temporary facility closures, production delays and capacity limitations; requiring modifications to our business processes; delaying the receipt of customer orders; requiring the implementation of social distancing measures that require changes to existing manufacturing processes; disrupting business travel; and increasing the risk that supply chains may be disrupted. These impacts have caused and may continue to cause delays in product shipments, decreases in revenue, profitability and cash from operations, which have caused and are expected to cause an adverse effect on our results of operations that may be material. The potential duration and impact of the outbreak on the United State economy and on our business are difficult to predict and cannot be estimated with any degree of certainty.

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

We are dependent upon obtaining revenues from sales of our products and raising additional capital from investors to meet our working capital needs. Since 2011, we have relied on a series of private placements and loans to fund our operating cash flow deficits. There is no assurance that we will generate the necessary net income or positive net operating cash flows to meet our working capital requirements and pay our debts as they become due in the future due.

We incurred net losses of \$687,000 in fiscal 2020, and \$937,000 in fiscal 2019. These losses have contributed to an accumulated deficit of \$30.6 million as of March 28, 2020. Through March 28, 2020, we have incurred expenditures of approximately \$24.0 million for the development and marketing of our RADAR/EW system product platform. Although we have shipped RADAR/EW system products to several customers, potential delays in the development of additional product features and upgrades, longer than anticipated sales cycles, or the ability to generate shipments in significant quantities, could significantly contribute to additional future losses and reduced liquidity.

If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to support our current operations and to respond to business challenges would be significantly limited. The lack of adequate working capital from any inability to generate positive net cash flow from operations or to raise equity or debt financing could force us to discontinue, delay or suspend R&D, product lines, business segments or otherwise substantially curtail or cease operations and would, therefore, have an adverse effect on our business and financial condition. As a result, we may also be required to further reduce expenses if our RADAR/EW product platform sales goals are not achieved and could, for example, choose to focus solely on our Microsource business segment, which we expect to be more profitable than our Giga-tronics business segment, to generate revenue and cash from operating activities. As part of such a restructuring, management believes the microwave components which the Company developed for the RADAR/EW test systems in the Giga-tronics business segment could be a source of growth for the Microsource business segment.

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

To bring the RADAR/EW product platform to its full potential, we may need to seek additional working capital; however, there are no assurances that such working capital will be available, or on terms acceptable to us. To the extent we satisfy our working capital needs by issuing additional equity securities, we will cause a dilution for our common stock. To the extent we satisfy our working capital needs by incurring additional debt, our operating cash flow may suffer in order to satisfy debt service obligations. Our recent history of losses, changes to our product focus and the development of new products makes it difficult to evaluate our current business model and future prospects. Accordingly, investors should consider our prospects in light of the costs, uncertainties, delays and difficulties frequently encountered by companies developing new products as we have, in fact, encountered. In particular, there is a significant risk that we will not be able to:

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

If we raise additional funds through further issuances of equity or convertible debt securities, our existing shareholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our existing capital stock. Any debt financing secured by us in the future could involve restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities. In addition, we may not be able to obtain additional financing on terms favorable to us, if at all.

Furthermore, we cannot assure you that any necessary financing, if available, would be available on attractive terms or that they would not have a significantly dilutive effect on our existing shareholders. If our financial condition were to worsen and we become unable to attract additional equity or debt financing or enter into other strategic transactions, we could become insolvent or be forced to declare bankruptcy, and we would not be able to execute our growth strategy.

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

The timing of our revenues is difficult to predict. Factors that may contribute to these fluctuations include our dependence on the defense industry and a limited number of customers, the nature and length of our sales cycles for our products and services, the duration and delivery schedules within our customer contracts and our ability to timely develop, produce and upgrade our products.

Most of our revenues result from a limited number of relatively large orders that we receive from prime defense contractors and governmental agencies. We spend substantial time and resources on our sales efforts without any assurance that our efforts will produce any sales. In addition, purchases of our products are frequently subject to budget constraints (including constraints imposed by governmental agencies), multiple approvals, and unplanned administrative, processing and other delays. Even if we receive a purchase order from a customer, there may be circumstances or terms relating to the purchase that delay our ability to recognize revenue from that purchase, which makes our revenue difficult to forecast. As a result, it is difficult to predict whether a sale will be completed, the particular fiscal period in which a sale will be completed or the fiscal period in which revenue from a sale will be recognized. For these reasons, our operating results may vary significantly from quarter to quarter. Such unpredictable operating results may adversely impact the trading price of our common stock.

Our sales are substantially dependent on the defense industry and a limited number of customers.

All of our current product and service offerings are directed towards the defense marketplace, which has a limited number of customers. If the defense market demand decreases, our sales may be less than projected shipments with a resulting decline in revenues. As a result, our business depends upon continued U.S. government expenditures on defense for which we provide support. These expenditures have not remained constant over time and have been reduced in some periods. Our business, prospects, financial condition, operating results, and the trading price of our common stock could be materially harmed, among other causes, by the following:

- budgetary constraints, including mandated automatic spending cuts, affecting across-the-board government spending, or specific agencies in particular, and changes in available funding;
- a shift in expenditures away from defense programs that we support;
- efforts to improve efficiency and reduce costs affecting government programs;
- U.S. government shutdowns due to, among other reasons, a failure by elected officials to fund the government and other potential delays in the appropriations process;
- delays in the payment of our invoices by government payment offices;
- changes in the political climate and general economic conditions, including a slowdown of the economy or unstable economic conditions and responses to conditions, such as emergency spending, that reduce funds available for other government priorities.

Additionally, the loss of any one customer may have a material adverse effect on future operating results and financial condition. Our product backlog also has a number of risks and uncertainties such as the cancellation or deferral of orders, dispute over performance of our products and our ability to collect amounts due under these orders. If any of these events occur, actual shipments could be lower than projected shipments and revenues could decline which would have an adverse effect on our operating results and liquidity.

If our reputation or relationships with the U.S. federal government or the limited number of defense contractors with whom we work were harmed, our future revenues and cash flows would be adversely affected.

We derive substantially all of our revenue from the U.S. federal government, its agencies and several defense contractors that supply them. Approximately \$21 million or 91% of consolidated revenues for the fiscal years ended March 28, 2020 and March 30, 2019 were derived from contracts with the U.S. federal government and its agencies, either directly or through defense contractors with whom with have contracted. Our reputation and relationships with various U.S. government entities and agencies, in particular with the U.S. Department of Defense and the U.S. Navy, and the limited number of defense contractors serving these agencies, are key factors in maintaining and growing these revenues and winning bids for new business. Negative press reports or publicity, regardless of accuracy, could harm our reputation. If our reputation or relationships with government agencies were to be negatively affected, or if we are suspended or debarred from contracting with government agencies for any reason, the amount of business with government and other customers would decrease and our financial condition and results of operations could be adversely affected.

Our failure to comply with a variety of complex procurement rules and regulations could result in delays of sales or shipments or our liability for penalties, including termination of our government contracts, disqualification from bidding on future government contracts and suspension or debarment from government contracting.

We must comply with various laws and regulations relating to the formation, administration and performance of government contracts, which affect how we do business with our customers and may impose added costs on our business. If we experience difficulty or are unable to comply with these requirements, we could face delays in the receipt of orders, production of products and performance of services and sales, or the loss of any of these.

Some U.S. federal statutes and regulations provide for penalties, including automatic debarment based on actions such as violations of the U.S. False Claims Act or the U.S. Foreign Corrupt Practices Act, or FCPA. The suspension or debarment in any particular case may be limited to a facility, contract or subsidiary involved in the violation or could be applied to our entire Company in severe circumstances. Even a narrow scope suspension or debarment could result in negative publicity that could adversely affect our ability to renew contracts and to secure new contracts, both with governments and private customers, which could materially and adversely affect our business, financial condition and results of operations.

Our markets involve rapidly changing technology and standards.

The market for electronics equipment is characterized by rapidly changing technology and evolving industry standards. We believe that our future success will depend in part upon our ability to develop, manufacture and successfully introduce new products and product lines with improved performance capabilities, and to continue to upgrade or enhance our existing products. There can be no assurance that we will successfully complete the development or enhancement of current or future products, or that such products will achieve market sufficient market acceptance. The inability to develop new products or enhance existing products in a timely manner and to achieve sustained commercial market acceptance could have a material adverse impact on our operating performance and liquidity.

Performance problems in our products or problems arising from the use of our products together with other vendors' products may harm our business and reputation.

Products as complex as those we produce may contain unknown and undetected defects or performance problems. For example, it is possible that one of our products might not comply with stipulated specifications under all circumstances. In addition, our customers generally use our products together with their own products and products from other vendors. As a result, when problems occur in a combined equipment environment, it may be difficult to identify the source of the problem. A defect or performance problem could result in lost revenues, increased warranty costs, diversion of engineering and management time and effort, impaired customer relationships and injury to our reputation generally.

Our RADAR/EW testing system products are complex and could have unknown defects or errors, which may increase our costs, harm our reputation with customers, give rise to costly litigation, or divert our resources from other purposes.

Our RADAR/EW testing system products are extremely complex. Despite testing, our initial products contained defects and errors and may in the future contain defects, errors, or performance problems following its sale or when new versions or enhancements are released, or even after these products have been used by our customers for a period of time. These problems could result in expensive and time-consuming design modifications or warranty charges, delays in the introduction of new products or enhancements, significant increases in our service and maintenance costs, diversion of our personnel's attention from our product development and sales efforts, exposure to liability for damages, damaged customer relationships, and harm to our reputation, any of which could have a material adverse impact on our results of operations. In addition, increased development and warranty costs could be substantial and could reduce our operating margins.

Our products contain components produced by suppliers which may be discontinued subject to supply constraints or no longer available in future periods, which could require that we redesign product components, lead to production delays and adversely impact our operating results and financial condition.

Certain components produced by our suppliers may be discontinued, subject to supply constraints or no longer available to us to produce our products. Such discontinuations or lack of supply could require us to seek replacement components that may take longer and cost more than initially expected to procure, redesign our products for different components and/or delay production of our production unless supplies become available, any of which could lead to delays in product sales.

If we fail to maintain satisfactory compliance with quality certifications and classified processing cybersecurity and control standards, product deliveries may be delayed or cancelled which would adversely impact our business, operating result and financial condition.

Certain of our customer contracts require that we maintain quality certifications and classified processing, cybersecurity and control standards. If we were unable to maintain such certifications and standards, our product shipments may be delayed or cancelled which would cause us to lose business or brand reputation, resulting in a material adverse effect on our business operating results and financial condition.

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

We could be subject to intellectual property infringement claims as the number of our competitors grows and if our products or the functionality of our products overlap with patents of our competitors. While we do not currently believe that we have infringed or are infringing on any proprietary rights of third parties, we cannot assure you that infringement claims will not be asserted against us or that those claims will be unsuccessful. We could incur substantial costs and diversion of management resources defending any infringement claims whether or not such claims are ultimately successful, even if such claims are meritless. Furthermore, a party making a claim against us could secure a judgment awarding substantial damages, as well as injunctive or other equitable relief that could effectively block our ability to provide products or services. We may not prevail in litigation given the complex technical issues and inherent uncertainties in intellectual property litigation. If litigation results in an adverse ruling, we could be required to:

- pay substantial damages for past, present and future use of the infringing technology;
- cease manufacture, use or sale of infringing products;
- discontinue the use of infringing technology;
- expend significant resources to develop non-infringing technology;
- pay substantial damages to our customers or end-users to discontinue use or replace infringing technology with non-infringing technology;
- license technology from the third party claiming infringement, which license may not be available on commercially reasonable terms, or at all; or
- relinquish intellectual property rights associated with one or more of our patent claims, if such claims are held invalid or otherwise unenforceable.

We face risks related to production delays, delays of customer orders and hig selling price of our RADAR/EW testing platform.

Our RADAR/EW testing platform has been our primary product development focus during the past eight years, however, delays in completing its initial development, together with early design and manufacturing issues and longer than anticipated sales cycles have contributed to our losses and increased our accumulated deficit as of March 28, 2020. Additionally, the average selling price of our RADAR/EW system is considerably higher than our prior general-purpose test and measurement products, which in turn requires additional internal approvals on the part of the customer and generally leads to longer sales cycles. Our financial condition may also cause potential customers to delay, postpone or decide against placing orders for our products. Continued longer than anticipated sales cycles in future fiscal years, or delays in production and shipping volume quantities, could have a material adverse impact on our operating results and liquidity.

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

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

We are dependent on our management team and development and operations personnel, and the loss of one or more key employees or groups could harm our business and prevent us from implementing our business plan in a timely manner.

Our success depends substantially upon the continued services of our executive officers and other key members of management. From time to time, there may be changes in our executive management team resulting from the hiring or departure of executives. Such changes in our executive management team may be disruptive to our business. We are also substantially dependent on the continued service of our existing development and operations personnel because of the complexity of our service and technologies. Staffing due to the loss of one or more of our key employees or groups can be expensive, divert management's attention from executing our business plan and could seriously harm our business. Furthermore, possible shortages of key personnel, including engineers, in the area surrounding our facilities could require us to pay more to hire and retain key personnel, thereby increasing our costs.

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

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. If we cannot provide reliable financial reports or prevent fraud, we may not be able to manage our business as effectively as we would if an effective control environment existed, and our business and reputation with investors may be harmed. As a result, any internal control deficiencies may adversely affect our financial condition, results of operations and access to capital.

Our competition has greater resources.

Several of our competitors, including, among others, Agilent/Keysight, Rohde & Schwarz and National Instruments have substantially greater research and development, manufacturing, marketing, financial, and technological personnel and managerial resources than us. These resources also make these competitors better able to withstand difficult market conditions than us. There can be no assurance that any products developed by these competitors will not gain greater market acceptance than any developed by us.

Business interruptions could delay or prevent our business activities, which could have a material adverse effect on our business, financial condition and results of operations.

Our primary facility and headquarters is located in the San Francisco Bay Area near known earthquake fault zones and is vulnerable to significant damage from earthquakes. We are also vulnerable to other natural disasters, epidemics, such as the COVID-19 epidemic, and other events that could disrupt our operations that may be beyond our control. We do not carry insurance for earthquakes and we may not carry sufficient business interruption insurance to compensate us for losses that may occur. Any losses or damages we incur could have a material adverse effect on our operating results, cash flows, and success as an overall business.

If we experience a significant cybersecurity attack or disruption in our IT systems, our business, reputation, and operating results could be adversely affected.

We rely on an internal IT system monitored by certain internal employees and third-party service providers to maintain our IT systems; maintain financial records; retain sensitive data, such as intellectual property, proprietary business information, and data related to customers, and suppliers; process orders; manage inventory; process shipments to customers; and operate other critical functions. The ongoing maintenance and security of this information is critical to the classified processing and control standards that our suppliers require us to maintain and the success of our business operations and our strategic goals.

Despite our implementation of network security measures, our network may be vulnerable to cybersecurity attacks, computer viruses, break-ins and similar disruptions. Our network security measures include, but are not limited to, the implementation of firewalls, antivirus protection, patches, log monitors, routine backups, offsite storage, network audits, and routine updates and modifications. Despite our efforts to create these security barriers, we may not be able to keep pace as new threats emerge and it is virtually impossible for us to entirely eliminate this risk. Cybersecurity attacks are evolving and include, but are not limited to, malicious software, attempts to gain unauthorized access to data, and other electronic security breaches that could lead to disruptions in systems, unauthorized release of confidential or otherwise protected information and corruption of data. Any such event could have a material adverse effect on our business, reputation, operating results and financial condition, and no assurance can be given that our efforts to reduce the risk of such attacks will be successful.

In addition, our IT systems may be susceptible to damage, disruptions or shutdowns due to power outages, hardware failures, telecommunication failures, user errors, catastrophes or other unforeseen events. Such events could result in the disruption of business processes, network degradation and system downtime, along with the potential that a third party will exploit our critical assets such as intellectual property, proprietary business information and data related to our customers, suppliers and business partners. To the extent that such disruptions occur, our customers and suppliers may lose confidence in our solutions and we may lose business or brand reputation, resulting in a material and adverse effect on our business operating results and financial condition.

The preparation of our financial statements requires the use of estimates that may vary from actual results

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make significant estimates that affect the financial statements. For example, we are required to make estimates about, among other things, accruals, inventory reserves, revenue and lease accounting as well as other long lived assets. Due to the inherent nature of these estimates, we may be required to significantly increase or decrease such estimates upon determination of the actual results. Any required adjustments could have a material adverse effect on us, our results of operations and the trading price of our common stock.

Risks Related to Investing in Our Securities

Our stock price is volatile.

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

- our ability to execute our business plan;
- changes in our industry;
- competitive pricing pressures;
- · our ability to obtain working capital financing;
- additions or departures of key personnel;
- · increases in the number of shares of common stock outstanding as our preferred stock converts to common stock, or as warrants are exercised, or both;
- sales of our common stock by us or our shareholders;
- operating results that fall below expectations, including actual or anticipated variations in our quarterly results;
- regulatory developments;
- economic and other external factors;
- period-to-period fluctuations in our financial results;
- the public's response to press releases or other public announcements by us or third parties, including filings with the SEC;
- changes in financial estimates or ratings by any securities analysts who follow our common stock, our failure to meet these estimates or failure of those analysts to initiate or maintain coverage of our common stock;
- · changes in expected national defense spending or budgets;
- operating and stock price performance of other companies that investors deem comparable to us;
- domestic and international economic factors unrelated to our performance;
- new technology used, or services offered, by competitors;
- the development and sustainability of an active trading market for our common stock; and
- any future sales of our common stock by our officers, directors and shareholders.

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

Our common stock is quoted on the Over-the-Counter Market and trading volumes have been limited.

As compared to a larger stock market with greater liquidity, our common stock is quoted on the OTCQB TM , which is the middle tier of the Over-the Counter Market, or the OTC, reserved for companies that are registered and reporting with the SEC or a U.S. banking regulator. The volume of trading of our common stock on the OTCQB has been very thin. Therefore, an investor might find it more difficult than it would be on a larger stock exchange to dispose of, or to obtain accurate quotations as to the market value of, our securities.

We cannot be certain that a more active trading market will develop or, if developed, be sustained. We also cannot be certain that purchasers of our common stock will be able to resell their common stock at prices equal to or greater than their purchase price. The development of a public market having the desirable characteristics of depth, liquidity and orderliness depends upon the presence in the marketplace of a sufficient number of willing buyers and sellers at any given time. We do not have any control over whether there will be sufficient numbers of buyers and sellers. Accordingly, we cannot be certain that an established and liquid market for our common stock will develop or be maintained. The market price of our common stock could experience significant fluctuations in response to our operating results and other factors. In addition, the stock market in recent years has experienced extreme price and volume fluctuations that often have been unrelated or disproportionate to the operating performance of individual companies. These fluctuations, and general economic and market conditions, may cause the market price of our common stock to decline substantially.

The trading price of our common stock may make it more difficult for you totrade shares of our common stock.

We could become subject to the SEC's "penny stock" rule if we fail to meet certain financial criteria set forth in the rule. If we become subject to the SEC's penny stock rule, the rule would impose various sales practice requirements on broker-dealers who sell our securities to persons other than established customers and accredited investors. For these types of transactions, the broker-dealer would have to make a special suitability determination for the purchaser and receive the purchaser's written consent to the transaction prior to sale. Consequently, if it were to apply to us, the rule could have an adverse effect on the ability of broker-dealers to sell our securities and could affect the ability of our shareholders to buy and sell our securities in the secondary market. If our common stock were to become a "penny stock" within the meaning of the rule, additional burdens imposed upon broker-dealers may discourage broker-dealers from effecting transactions in penny stocks, which could reduce the liquidity of our common stock and have a material adverse effect on the trading market for our common stock.

While our common stock is not subject to the SEC's penny stock rule, some broker-dealers may nonetheless choose to limit your ability to trade shares of our common stock, which could make it more difficult for you to sell your shares, as well as having a material adverse effect on the trading market for our common stock.

Our common stock ranks junior to all of our preferred stock and indebtedness.

As of March 28, 2020, our outstanding preferred shares had an aggregate liquidation preference of \$3.7 million and we had an aggregate of \$4.6 million in debt and other liabilities including long term lease obligations.

In the event of our bankruptcy, liquidation or winding-up, our assets will be available to make payments to holders of our common stock only after all of our indebtedness and other liabilities and all of the liquidation preferences on any then outstanding Series B, Series C, Series D and Series E preferred stock have been paid. Consequently, if we are forced to liquidate our assets to pay our creditors, we may not have sufficient assets remaining to pay amounts to the holders of shares of our common stock then issued and outstanding.

We have a significant number of outstanding warrants, options and shares of convertible preferred stock, which may cause significant dilution to our shareholders, adversely impact the market price of our common stock and make it more difficult for us to raise funds through future equity offerings.

As of March 28, 2020, we had 2,635,856 shares of common stock outstanding. In addition, as of that date we had outstanding warrants to acquire 163,545 shares of common stock, options to acquire 240,758 shares of common stock and shares of convertible preferred stock convertible into an aggregate of 2,698,164 shares of common stock. The issuance of shares of common stock upon the exercise of warrants or options or conversion of preferred stock would dilute the percentage ownership interest of all holders of our common stock, might dilute the book value per share of our common stock and would increase the number of our publicly traded shares, which could depress the market price of our common stock.

The fact that our shareholders, warrant holders and option holders can sell substantial amounts of our common stock in the public market, whether or not sales have occurred or are occurring, could make it more difficult for us to raise additional funds through the sale of equity or equity-related securities in the future at a time and price that we deem reasonable or appropriate, or at all.

We may issue additional shares of common or preferred stock in the future, which could dilute a shareholder's ownership of common stock.

Our articles of incorporation authorize our board of directors, generally without shareholder approval, to, among other things, issue additional shares of common or preferred stock. The issuance of any additional shares of common or preferred stock would be dilutive to an existing shareholder's ownership of our common stock. The issuance of preferred stock could impair the voting, dividend and liquidation rights of common shareholders without their approval. To the extent that we issue options or warrants to purchase common stock in the future and the options or warrants are exercised, our shareholders may experience further dilution. Holders of shares of our common stock have no preemptive rights that entitle holders to purchase their pro rata share of any offering of shares of any class or series and, therefore, shareholders may not be permitted to invest in future issuances of our common or preferred stock.

Shares eligible for future sale may adversely affect the market.

From time to time, certain of our shareholders may decide to sell some or all of their shares of common stock that they currently hold or could acquire upon the conversion of our preferred stock or exercise of warrants or other derivative securities by means of ordinary brokerage transactions in the open market. Any substantial sale of our common stock may have a material adverse effect on the market price of our common stock.

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

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

If securities industry analysts do not publish research reports on us, or publish unfavorable reports on us, then the market price and market trading volume of our common stock could be negatively affected.

Any trading market for our common stock may be influenced in part by any research reports that securities industry analysts publish about us. We do not currently have and may never obtain research coverage by securities industry analysts. If no securities industry analysts commence coverage of us, the market price and market trading volume of our common stock could be negatively affected. In the event we are covered by analysts, and one or more of such analysts downgrade our securities, or otherwise reports on us unfavorably, or discontinues coverage of us, the market price and market trading volume of our common stock could be negatively affected.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Our principal executive offices along with our marketing, sales, and engineering offices and manufacturing facilities are located in a 23,873 square foot facility in Dublin, California, which we leased on January 5, 2017 and began occupying in April 2017 under a lease agreement which expires in March 2023.

We added a second engineering office located in a 1,200 square foot facility in Nashua, New Hampshire, which we leased on February 1, 2019 under a lease agreement which expires on January 31, 2022. Effective March 1, 2020, we amended and replaced the original lease agreement to increase the Nashua facility to 2,400 square feet which expires on February 28, 2023.

We believe that our Dublin and New Hampshire facilities are adequate for our business activities.

ITEM 3. LEGAL PROCEEDINGS

As of March 28, 2020, the Company had no material pending legal proceedings.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable

PART II

ITEM 5. MARKET FOR COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUERREPURCHASES OF EQUITY SECURITIES

Common Stock Market Prices

Our common stock is traded on the OTCQB market using the symbol "GIGA". The number of record holders of our common stock as of March 28, 2020 was approximately 104. A significantly larger number of shareholders may be "street name" or beneficial holders, whose shares of record are held by banks, brokers and other financial institutions. The table below shows the high and low closing bid quotations for the common stock during the indicated fiscal periods. These quotations reflect inter-dealer prices without mark-ups, mark-downs, or commission and may not reflect actual transactions.

	Fiscal Quarte	r				
	2020	High	Low	2019	High	Low
First Quarter	(3/31 - 6/29) \$	6.00 \$	4.35	(4/01 - 6/30) \$	5.25 \$	3.45
Second Quarter	(6/30 - 9/28)	6.70	4.50	(7/01 - 9/29)	6.90	4.50
Third Quarter	(9/29 -12/28)	5.25	3.75	(9/30 -12/29)	5.25	3.45
Fourth Quarter	(12/29 - 3/28)	4.63	2.26	(12/30 - 3/30)	6.75	3.60

We have not paid cash dividends on our common stock in the past and have no current plans to do so in the future, believing our available capital is best used to fund our operations, including product development and enhancements. In addition, in the absence of positive retained earnings, California law permits payment of cash dividends on our common stock only to the extent total assets exceed the sum of total liabilities and the liquidation preference amounts of preferred securities. At March 28, 2020, the Company's assets were more than this sum by \$588,000. Our shares of Series E preferred stock provide for semi-annual 6% cumulative cash dividends based on the original purchase price of \$25.00 per share, however we may exercise our right to pay any such dividends in shares of our common stock instead of cash.

Equity Compensation Plan Information

The following table provides information on options and other equity rights outstanding and available under the Company equity compensation plans at March 28, 2020.

Equity Compensation Plan Information

Equity Compensation Plan Information					
				No. of	
				securities	
				remaining	
				available for	
				future issuance	
				under equity	
	No. of			compensation	
	securities to be Weighted		Weighted	plans	
	issued upon		average	(excluding	
	exercise of		exercise price	securities	
	outstanding		of outstanding	reflected in	
	options		options	column (a))	
Plan Category	(a)		(b)	(c)	
Equity compensation plans approved by security holders (1)	214,075	\$	5.97	24,493	
Equity compensation plans not approved by security holders (2)	26,683		4.95	-	
Total	240,758	\$	5.86	24,493	

- (1) Does not include warrants issued to purchasers of units consisting of stock and warrants in private placements or to lenders in connection with debt financing. Includes nonqualified options for 19,983 shares repriced from \$24.60, \$21.30 and \$24.75 per share to \$4.95 per share, the closing market price on the effective date. Does not include warrants to purchase 156,700 shares of common stock at the price of \$3.75 per share issued to a placement agent for services in connection with a private placement.
- (2) Reflects a special grant of nonqualified options for 26,683 shares of common stock in consideration of employment of an employee and officer on March 28, 2018. The exercise price is \$4.95 per share and the vesting schedule is also 25% after one year and 1/48th of the original grant each month thereafter.

Issuer Repurchases

We did not repurchase any of our equity securities during the final quarter of our fiscal year ended March 28, 2020.

ITEM 6. SELECTED FINANCIAL DATA

Pursuant to Item 301(c) of Regulation S-K, the Company, as a smaller reporting company, is not required to provide the information required by this item.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview of the Company's Business

We manufacture specialized electronics equipment for use in both military test and airborne operational applications. Our operations consist of two business segments, those of our wholly owned subsidiary, Microsource, and those of our Giga-tronics Division.

- Microsource's primary business is the design of custom microwave products as well as the production of microwave components using chip and wire assembly methods. Our Microsource Division offers a line of tunable, synthesized Band Reject Filters for solving interference problems in RADAR and Electronic Warfare (RADAR/EW) applications. Self-protection systems onboard high-performance military aircraft often require RADAR filters to block electromagnetic interference generated by other onboard electronic systems, particularly the aircraft's main RADAR. Microsource's high-speed, tunable notch filters are designed to block interference from both continuous wave and wide bandwidth emissions using proprietary driver and phase lock technology. We custom design these filters specifically for each application.
- The Giga-tronics Division designs, manufactures and markets a family of functional test products for the RADAR/EW segment of the defense electronics market (Advanced Signal Generator & Analyzer "ASGA" products). Our RADAR/EW test products are used to evaluate and improve the performance of RADAR/EW systems.

Significant Orders

Both Microsource and the Giga-tronics Division have historically received a limited number of large customer orders periodically. The timing of orders is sporadic and difficult to predict, and any achievement of associated milestones can cause significant differences in orders received, backlog, sales, deferred revenue, inventory and cash flow when comparing one fiscal period to another. Below is a review of recently received significant orders:

Microsource

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

In September 2017, Microsource received a \$4.8 million order for continuing the YIG RADAR filter for a fighter jet platform. The Company began initial shipments of these filters in the fourth quarter of fiscal 2018 and recognized revenue on the majority of the order in fiscal 2019.

In February 2018, Microsource received a \$1.6 million YIG RADAR filter order from one of our customers. The Company recognized \$1.1 million of revenue in fiscal 2019 and recognized the remainder of revenue in fiscal 2020.

In November 2018, Microsource received a \$4.5 million YIG RADAR filter order from one of our customers. The Company recognized revenue in fiscal 2019 and 2020 of \$1.1 million and \$3.0 million, respectively, and will recognize the remaining revenue in fiscal year 2021.

In June 2019, Microsource received two orders totaling \$3.7 million from Lockheed Martin and Raytheon. The Company recognized revenue of \$2.2 million in fiscal 2020 with respect to these orders and expects to recognize the remainder of the revenue through fiscal 2022.

In September 2019, Microsource received two YIG RADAR filter orders totaling \$2.9 million from Boeing Company. The Company recognized \$1.0 million in revenue associated with these orders in fiscal 2020 and expects to recognize the remainder of the revenue through fiscal 2023.

Giga-tronics Division

In February 2019, the Giga-tronics Division received a \$4.0 million order from the United States Navy for our customized Real-Time Threat Emulation System (TEmS) solution, which is specifically tailored for their application. The order is comprised of two TEmS units of equal value along with approximately \$671,000 of engineering services to support and upgrade currently installed systems. The Company fulfilled the first TEmS unit order in the March 2019 quarter, the Company's fourth quarter of fiscal 2019. The second TEmS unit order was fulfilled during the June 2019 quarter, the Company's first quarter of fiscal 2020. Approximately \$550,000 of the engineering services were completed in fiscal 2020 with the remainder expected to be completed in fiscal 2021.

In March 2020, the Giga-tronics Division received a \$1.5 million order from the United States Navy for mission critical upgrade kits to existing fielded Radar Threat Generation Systems. Approximately \$700,000 was recognized as revenue in fiscal 2020 with the remainder expected to ship in the first quarter of fiscal 2021.

Results of Operations

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

New Orders				% change	
				2020	2019
				vs.	vs.
(Dollars in thousands)	2020	2019	2018	2019	2018
ASGA Products	\$ 1,869	\$ 3,935	\$ 1,813	(53)%	117%
Legacy Products	309	165	238	87%	(31)%
Giga-tronics Division	\$ 2,178	\$ 4,100	\$ 2,051	(47)%	100%
Microsource	9,655	5,327	7,550	81%	(29)%
Total	\$ 11,833	\$ 9,427	\$ 9,601	26%	(2)%

Total new orders received in fiscal 2020 were \$11.8 million compared to \$9.4 million received in fiscal 2019. The increase was due to the Microsource business unit which saw a \$4.3 million or 81% increase in fiscal 2020. Giga-tronics Division was \$1.9 million or 47% lower primarily due to the Company's receipt in February 2019 of its \$4.0 million ASGA product order from the U.S. Navy.

Total new orders received in fiscal 2019 were \$9.4 million which was relatively consistent with the \$9.6 million received in fiscal 2018. Although total new orders were consistent year over year, new orders for Giga-tronics Division products in fiscal 2019 increased \$2.0 million or 100% from fiscal 2018 due mainly to the Company's receipt in February 2019 of its \$4.0 million ASGA product order from the U.S. Navy. The Microsource business unit saw a \$2.2 million or 29% decrease in fiscal 2019 primarily due to the impact of the timing of large, multi-year RADAR filter production orders.

Both the Microsource and Giga-tronics Division receive large orders. The timing of receipt of these orders can vary significantly from period to period as seen over the three year periods shown above.

The following table shows order backlog and related information at fiscal year-end:

Backlog				% change	
				2020	2019
				vs.	vs.
(Dollars in thousands)	2020	2019	2018	2019	2018
ASGA Products	\$ 899	\$ 2,195	\$ 20	(59)%	10875%
Legacy Products	_	47	57	(100)%	(18)%
Giga-tronics Division	899	2,242	77	(60)%	2812%
Microsource	5,854	4,446	11,088	32%	(60)%
Backlog of unfilled orders	\$ 6,753	\$ 6,688	\$ 11,165	1%	(40)%

Backlog at the end of fiscal 2020 of \$6.8 million was relatively consistent with the end of fiscal 2019 (\$6.7 million). The increase in Microsource business unit orders during fiscal 2020 was attributable to RADAR filter orders. Giga-tronics Division backlog was \$1.3 million or 60% lower primarily due to the Company's receipt of an ASGA product order from the U.S. Navy in fiscal 2019. Backlog amounts for fiscal years 2020 and 2019 reflect the impact of adoption of ASC 606, *Revenue from Contracts with Customers ("ASC 606")*, effective April 1, 2018, in which the Company recognizes revenue for certain contracts as it incurs costs, as opposed to when units are delivered.

Backlog at the end of fiscal 2019 versus the prior year decreased by 40% primarily due to the impact of the adoption of ASC 606 on April 1, 2018. The Giga-tronics ASGA backlog at March 30, 2019 compared to March 31, 2018 increased \$2.2 million primarily due to a large U.S. Navy order received in fiscal 2019.

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

Allocation of Net Sales				% change	
				2020	2019
(Dallana in the constant)	2020	2010	2010	VS.	VS.
(Dollars in thousands)	2020	2019	2018	2019	2018
ASGA Sales	\$ 3,165	\$ 1,760	\$ 2,205	80%	(20)%
Legacy Product Sales	356	175	532	103%	(67)%
Giga-tronics Division	\$ 3,521	\$ 1,935	\$ 2,737	82%	(29)%
Microsource	8,247	9,213	7,063	(10)%	30%
Total	\$ 11,768	\$ 11,148	\$ 9,800	6%	14%

Net sales for the fiscal year ended March 28, 2020 were \$11.8 million, an increase of 6%, compared to \$11.1 million for the fiscal year ended March 30, 2019. The majority of the sales increase in fiscal 2020 was attributable to Giga-tronics Division which was higher by \$1.6 million or 82% due to a large U.S. Navy order, partially offset by a \$966,000 or 10% decrease in Microsource sales which was caused mainly by the timing of revenue recognition of certain orders that cover multiple interim and annual periods and a production delay in the fourth quarter of fiscal 2020 due to the unexpected short-term closure in March 2020 related to California's COVID-19 shelter-in-place order. In addition, we also temporarily halted production earlier in the fourth quarter of fiscal 2020 to execute a carefully planned cybersecurity upgrade required by the Navy and had expected to shift and complete this production volume during March, when the California shutdown unexpectedly occurred.

Net sales for the fiscal year ended March 30, 2019 were \$11.1 million, an increase of 14%, compared to \$9.8 million for the fiscal year ended March 31, 2018. The majority of the sales increase in fiscal 2019 was attributable to Microsource which was higher by \$2.2 million or 30% partially offset by a \$445,000 or 20% decrease in ASGA sales, and a \$357,000 or 67% decrease in legacy product sales due to the Company's legacy product line divestitures. The increase in net sales for Microsource was primarily due to higher RADAR filters product sales including the impact of the adoption of ASC 606, which was significantly offset by the lower sales of our Giga-tronics Division sales compared to the prior year. Effective April 1, 2018, the Company adopted ASC 606, *Revenue from Contracts with Customers*, as amended, which changed the way the Company recognizes revenue for certain contracts.

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

Gross Profit				% change	
				2020	2019
				vs.	vs.
(Dollars in thousands)	2020	2019	2018	2019	2018
Giga-tronics Division	\$ 1,881	\$ 1,097	\$ (12)	71%	9242%
Microsource	2,707	3,626	2,748	(25)%	32%
Total	\$ 4,588	\$ 4,723	\$ 2,736	(3)%	73%

Gross profit decreased slightly in fiscal 2020 to \$4.6 million from \$4.7 million for fiscal 2019. Although Giga-tronics Division gross profit increased \$784,000 or 71% primarily due to an increase in sales of 82%, gross profit in fiscal 2020 was negatively impacted by increased unabsorbed fixed manufacturing overhead due to lower production volume in the fourth quarter of fiscal 2020 caused primarily by the unexpected short term closure in March 2020 related to California's COVID-19 shelter-in-place order.

The Company was unexpectedly subject to California's COVID 19 Shelter In Place order during March 2020, resulting in the short term closure of the Company's California facilities. Due to the closure, the Company's operating results and cash flows were adversely impacted and results were lower than expected.

Gross profit increased in fiscal 2019 to \$4.7 million from \$2.7 million for fiscal 2018. The higher gross profit was primarily due to two factors, a 30% increase in Microsource sales and 57% increase in gross margins at the Giga-tronics division. In Fiscal 2018 the Giga-tronics division incurred high expenses to upgrade products at customer sites and to amortize a software license. These costs were one time costs and did not repeat in fiscal 2019.

Operating expenses were as follows for the fiscal years shown:

Operating Expenses				% change	
				2020	2019
				VS.	vs.
(Dollars in thousands)	2020	2019	2018	2019	2018
Engineering	\$ 1,552	\$ 1,304	\$ 1,794	19%	(27)%
Selling, general and administrative	3,469	3,707	4,076	(6)%	(9)%
Total	\$ 5,021	\$ 5,011	\$ 5,870	0%	(15)%

Total operating expenses remained flat in fiscal 2020 compared to fiscal 2019. Engineering expenses increased by \$248,000 during fiscal 2020 when compared to fiscal 2019 primarily due to an increase in R&D personnel and additional R&D expenditures in connection with the development efforts of EW/RADAR test products in both the Dublin and New Hampshire facilities during fiscal 2020 compared to fiscal 2019. An additional \$247,000 of engineering expenses were charged to cost of goods sold as part of an engineering contract with the Navy. Selling, general and administrative expenses decreased by 6% or \$238,000 primarily due to a decrease in headcount and personnel related expenses.

Total operating expenses decreased by 15% or \$859,000 in fiscal 2019 compared to fiscal 2018. Engineering expenses decreased \$490,000 during fiscal 2019 when compared to fiscal 2018 primarily due to a decrease in personnel related expenses due to lower headcount. Selling, general and administrative expenses decreased by 9% or \$369,000 primarily due to a decrease in headcount and personnel related expenses, and a decrease in bonuses and commissions.

Net Interest Expense

Net interest expense in fiscal 2020 was \$252,000 a decrease of \$355,000 from fiscal 2019. Interest expense decreased primarily due to a \$204,000 reduction in the accretion of the PFG loan discount which had only one month of amortization remaining in fiscal 2020 versus twelve months in fiscal 2019 as well as from lower outstanding borrowings under the PFG loan and Bridge Bank agreements.

Net interest expense in fiscal 2019 was \$607,000 an increase of \$146,000 over fiscal 2018. The increase in fiscal 2019 interest expense was primarily due to the loan modification with PFG effective March 26, 2018 which resulted in an increase in accretion of discounts to \$223,000 in fiscal 2019 compared to \$127,000 recorded in fiscal 2018.

Net Loss

Net loss was \$687,000 in fiscal 2020, compared to a net loss of \$937,000 in fiscal 2019. The decrease in net loss was primarily due to the increase in Giga-tronics Division net sales and a decrease in interest expense, both of which were partially offset by the decrease in Microsource revenues and gross profits described above.

Net loss was \$937,000 in fiscal 2019, compared to a net loss of \$3.1 million in fiscal 2018. The decrease in net loss for fiscal 2019 was primarily due to a significantly improved gross margin of 42% in fiscal 2019 compared to 28% in fiscal 2018 due to the change in revenue mix described above (including the impact of the adoption of ASC 606) as well as a decrease in operating expenses of 15% or \$859,000 in fiscal 2019 over fiscal 2018 described above.

Net Inventories

Inventories consisted of the following:

Net Inventories							% change	
							2020	2019
							vs.	vs.
(Dollars in thousands)	Marc	ch 28, 2020	Mar	ch 30, 2019	Mar	ch 31, 2018	2019	2018
Raw materials	\$	890	\$	759	\$	2,290	17%	(67)%
Work-in-progress		1,828		1,523		2,100	20%	(27)%
Finished goods		263		57		561	361%	(90)%
Demonstration inventory		280		395		536	(29)%	(26)%
Total	\$	3,261	\$	2,734	\$	5,487	19%	(50)%

Net inventories increased by \$527,000 at March 28, 2020 compared to March 30, 2019. The increase was primarily the result of higher inventories due to the timing of RADAR filter production, and increased inventory to support ASGA sales efforts.

Net inventories decreased by \$2.8 million at March 30, 2019 compared to March 31, 2018. The decrease was primarily the result of the impact of the adoption of ASC 606 as well as lower inventory due to the timing of RADAR filter production, the shipment of an ASGA system, and lower demonstration inventory.

Financial Condition and Liquidity

_	Fiscal Year Ended					
	March 28, 2020					
Cash and cash equivalents	657	\$ 878				
Total current assets	7,059	5,534				
Total current liabilities	3,372	3,913				
Working capital	3,687	\$ 1,621				
Current ratio	2.09	1.41				

As of March 28, 2020, the Company had \$657,000 in cash and cash equivalents, compared to \$878,000 as of March 30, 2019. The Company had working capital of \$3.7 million at March 28, 2020 compared to \$1.6 million at March 30, 2019. The current ratio (current assets divided by current liabilities) at March 28, 2020 was 2.09 compared to 1.41 at March 30, 2019. The increase in working capital was primarily due to \$2.6 million in net cash proceeds from the issuance of stock.

Cash Flows

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

	Fiscal Y	ear Ended	
	March 28, 2020	March 30, 2019	
Net cash used in operating activities	\$ (2,359)	\$ (1,307)	
Net cash used in investing activities	(123)	-	
Net cash provided by financing activities	\$ 2,261	\$ 700	

Cash Flows from Operating Activities

We experienced negative cash flows from operating activities for fiscal years 2020 and 2019 due primarily to operating results. During the fourth quarter of fiscal 2020, cash flows from operating activities were negatively impacted by the COVID-19 pandemic as government-mandated "Shelter in Place" orders temporarily suspended manufacturing activity and delayed sales efforts and the receipt of orders.

Cash used by operating activities during the fiscal year ended March 28, 2020 was \$2.4 million. Net cash used in operating activities during this period was primarily attributable to our net loss of \$687,000, changes in our operating assets and liabilities accounts of \$1.9 million, partially offset by non-cash charges of \$184,000 for depreciation and amortization and \$301,000 for share-based compensation.

Cash used by operating activities during the fiscal year ended March 30, 2019 of \$1.3 million was primarily attributable to our net loss of \$937,000 and net decreases in our operating assets and liabilities accounts of \$1.2 million, partially offset by other non-cash charges of \$264,000 for depreciation and amortization and \$245,000 for share-based compensation.

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

Cash Flows from Investing Activities

Cash used in investing activities for the fiscal year ended March 28, 2020 was \$123,000, primarily due to purchases of equipment for manufacturing and engineering.

Cash used in investing activities for the fiscal year ended March 30, 2019 was zero.

Cash Flows from Financing Activities

Cash provided by financing activities for the fiscal year ended March 28, 2020 was \$2.3 million, primarily due to \$2.6 million in net cash proceeds from the Company's issuance of common stock, proceeds from borrowings net of issuance costs of \$1.5 million and proceeds from the exercise of warrants of \$211,000, partially offset by \$1.7 million of loan repayments on borrowings and \$291,000 of lease payments.

Cash provided by financing activities for the fiscal year ended March 30, 2019 was \$700,000, primarily due to net proceeds of \$1.2 million from the Company's issuance of Series E Shares as well as proceeds from the exercise of warrants of \$112,000, partially offset by a \$552,000 decrease in our line of credit and a \$52,000 decrease in our capital lease.

Contractual Obligations

We lease our Dublin, California facility under an operating lease agreement which expires in March 2023. We also lease certain equipment under operating leases. Total future minimum lease payments under these leases amount to approximately \$2.1 million, of which \$450,000 is scheduled to be paid in fiscal 2021.

We lease our Nashua, New Hampshire facility under an amended operating lease agreement which expires February 28, 2023. Total future minimum lease payments under this lease amount to \$87,500, of which \$30,000 is scheduled to be paid in fiscal 2021.

We lease equipment under capital leases that expire through September 2020. The future minimum lease payments under these leases are approximately \$31,000.

We are committed to purchase certain inventory under non-cancelable purchase orders. As of March 28, 2020, total non-cancelable purchase orders were approximately \$2,132,000 and are scheduled to be delivered to the Company at various dates through March 2021.

Critical Accounting Policies

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

Revenue Recognition

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

In determining the appropriate amount of revenue to be recognized as we fulfill our obligations under our agreements, we perform the following steps: (i) identify the promised goods or services in the contract; (ii) determine whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measure the transaction price, including the constraint on variable consideration; (iv) allocate the transaction price to the performance obligations based on estimated selling prices; and (v) recognize revenue when (or as) we satisfy each performance obligation.

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

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

Product Warranties

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

Accounts Receivable and Allowance for Doubtful Accounts

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

Inventory

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

Income Taxes

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

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

Stock Based Compensation

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

Off-Balance-Sheet Arrangements

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

ITEM 7A. 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 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO FINANCIAL STATEMENTS AND SCHEDULES

Financial Statements	Page
Consolidated Balance Sheets - As of March 28, 2020 and March 30, 2019	29
Consolidated Statements of Operations - Years ended March 28, 2020 and March 30, 2019	30
Consolidated Statements of Shareholders' Equity - Years ended March 28, 2020 and March 30, 2019	31
Consolidated Statements of Cash Flows - Years ended March 28, 2020 and March 30, 2019	32
Notes to Consolidated Financial Statements	33-51
Report of Independent Registered Public Accounting Firm	52
28	

GIGA-TRONICS INCORPORATED CONSOLIDATED BALANCE SHEETS

(In thousands except share data)

(In thousands except share data)		March 28, 2020		March 30, 2019
Assets		2020		2019
Current assets:				
Cash and cash-equivalents	\$	657	\$	878
Trade accounts receivable, net of allowance of \$8 and \$8, respectively	Ψ	932	Ψ	568
Inventories, net		3,261		2,734
Prepaid expenses and other current assets		2,209		1,354
Total current assets		7,059		5,534
Property and equipment, net		508		569
Right of use asset		1.183		_
Other long term assets		176		176
Total assets	\$	8.926	\$	6,279
Liabilities and shareholders' equity	<u> </u>	0,720	Ψ	3,279
Current liabilities:				
Accounts payable	\$	803	\$	747
Loans payable, net of discounts and issuance costs	Ψ	1.320	Ψ	1.781
Accrued payroll and benefits		300		476
Deferred revenue		159		_
Deferred rent		_		74
Lease obligations		426		41
Deferred liability related to asset sale		_		40
Other current liabilities		364		754
Total current liabilities		3,372		3,913
Other non-current liabilities		119		172
Long term deferred rent		_		358
Long term lease obligations		1,135		21
Total long term liabilities		1,254		551
Commitments and contingencies		, -		
Shareholders' equity:				
Preferred stock; no par value; Authorized - 1,000,000 shares				
Series A convertible- designated 250,000 shares; no shares at March 28, 2020 and March 30, 2019 issued and outstanding		_		_
Series B, C, D convertible - designated 19,500 shares; 17,781.64 shares at March 28, 2020 and 18,533.51 at March				
30, 2019 outstanding; (liquidation preference of \$3,367 at March 28, 2020 and \$3,540 at March 30, 2019)		2,745		2,911
Series E convertible- designated 100,000 shares; 9,200 shares at March 28, 2020 and 98,400 shares at March 30,		_,,		
2019 outstanding; (liquidation preference of \$345 at March 28, 2020 and \$3,690 at March 30, 2019)		177		1,895
Common stock; no par value; Authorized – 13,333,333 shares; 2,635,856 shares at March 28, 2020 and 757,367				-,
shares at March 30, 2019 issued and outstanding		31,952		25,557
Accumulated deficit		(30,574)		(28,548)
Total shareholders' equity		4,300		1,815
Total liabilities and shareholders' equity	\$	8,926	\$	6,279

GIGA-TRONICS INCORPORATED CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands except per share data)

		Years Ended	
		March 28,	March 30,
		2020	2019
Net revenue			
Goods	\$	3,521 \$	2,123
Services		8,247	9,025
Total revenue		11,768	11,148
Cost of sales		7,180	6,425
Gross profit		4,588	4,723
Operating expenses:			
Engineering		1,552	1,304
Selling, general and administrative		3,469	3,707
Total operating expenses		5,021	5,011
Operating loss		(433)	(288
Interest expense, net		(252)	(607
Loss before income taxes		(685)	(895
Provision for income taxes		2	42
Net loss	\$	(687) \$	(937
Deemed dividend on Series E shares		(94)	(106
Cumulative dividends on Series E shares		(1,245)	_
Net loss attributable to common shareholders	\$	(2,026) \$	(1,043
Loss per common share – basic and diluted	\$	(1.64) \$	(1.45
Weighted average common shares used in per share calculation:	•	() +	(-1.12
Basic and diluted		1,232	718

GIGA-TRONICS INCORPORATED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(In thousands except share data)

	Preferre	d Sto	ck				Accumulated		
	Shares		Amount	Shares		Amount		Deficit	Total
Balance at March 31, 2018	62,334	\$	3,613	687,510	\$	25,200	\$	(28,682)	\$ 131
Cumulative effect of ASC 606 Adoption	_		_	_		_		1,177	1,177
Net loss	_		_	_		_		(937)	(937)
Restricted stock granted	_		_	20,667		_		_	_
Restricted stock forfeited	_		_	(1,667)		_		_	_
Stock based compensation	_		_	_		245		_	245
Shares issued related to loan agreement	_		_	2,000		_		_	_
Series E preferred stock issuance, net of									
issuance costs of \$212	56,200		1,193	_		_		_	1,193
Warrants exercises	_		_	38,190		112		_	112
Series E dividends	_		_	_		_		(106)	(106)
Series E preferred stock converted to common	(1,600)		_	10,667		_		_	_
Balance at March 30, 2019	116,934	\$	4,806	757,367	\$	25,557	\$	(28,548)	\$ 1,815
Net loss	_		_	_		_		(687)	(687)
Restricted stock granted	_		_	10,000		_		_	_
Restricted stock forfeited	_		_	(1,332)		_		_	_
Stock based compensation	_		_	_		301		_	301
Fractional shares due to reverse stock split	_		_	(81)		_		_	_
Shares issued related to loan agreement	_		_	167		_		_	_
Common stock issuance, net of offering costs	_		_	846,001		2,564		_	2,564
Warrants exercises	_		_	84,095		212		_	212
Series E dividends	_		_	44,627		189		(94)	95
Series E preferred stock issuance	_		(2)	_		2		_	_
Series B preferred stock converted to common	(752)		(166)	5,012		166		_	_
Series E preferred stock converted to common	(89,200)		(1,716)	890,000		2,961		(1,245)	
Balance at March 28, 2020	26,982	\$	2,922	2,635,856	\$	31,952	\$	(30,574)	\$ 4,300

GIGA-TRONICS INCORPORATED CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

		Years Ended			
		March 28, 2020	March 30, 2019		
Cash flows from operating activities:					
Net loss	\$	(687) \$	(937)		
Adjustments to reconcile net loss to net cash used in operating activities:					
Depreciation		184	264		
Stock based compensation		301	245		
Amortization of discount on debt		20	224		
Accrued interest and fees on loan payable		(257)	111		
Change in deferred rent		(3)	(55)		
Changes in operating assets and liabilities:					
Trade accounts receivable		(364)	(204)		
Inventories		(527)	1,172		
Prepaid expenses and other current assets		(855)	(1,078)		
Right of use asset		178			
Accounts payable		56	(249)		
Accrued payroll and benefits		(176)	133		
Deferred revenue		159	(807)		
Other current and non-current liabilities		(388)	(126)		
Net cash used in operating activities		(2,359)	(1,307)		
Twee cash asca in operating activities		(2,557)	(1,507)		
Cash flows from investing activities:					
Purchases of property and equipment		(123)	_		
Net cash used in investing activities		(123)	_		
Cash flows from financing activities:		· ,			
Payments on leases		(291)	(52)		
Repayments of borrowings		(1,676)	(552)		
Proceeds from loan payable, net of issuance costs		1,453			
		2,564	1,192		
Proceeds from issuance of stock, net of issuance costs					
Proceeds from exercise of warrants		211	112		
Net cash provided by financing activities		2,261	700		
Decrease in cash and cash-equivalents		(221)	(607)		
D. distriction and and assistant		070	1 405		
Beginning cash and cash-equivalents	\$	878 657 \$	1,485 878		
Ending cash and cash-equivalents	3	637 \$	8/8		
Supplementary disclosure of cash flow information:					
Cash paid for income taxes	\$	57 \$	32		
Cash paid for interest	\$ \$	402 \$	248		
Supplementary disclosure of noncash investing and financing activities:	J.	402 \$	240		
Cumulative effect of adoption ASC 606 on inventory	\$	— \$	(1,581)		
Cumulative effect of adoption ASC 606 on prepaid expenses and other current assets	\$ \$	— \$ — \$	189		
Cumulative effect of adoption of ASC 606 on deferred revenue	\$ \$	— \$ — \$	2,567		
Cumulative effect of adoption of ASC 800 on deferred revenue Cumulative effect of adoption of ASC 842 on right of use assets	\$ \$	1,361 \$	2,367		
Cumulative effect of adoption of ASC 842 on fight of use assets Cumulative effect of adoption of ASC 842 on deferred rent	\$ \$	1,361 \$ 429 \$			
Cumulative effect of adoption of ASC 842 on deterred rent Cumulative effect of adoption of ASC 842 on lease liability	\$ \$	1,790 \$	_		
	\$ \$,	_		
Issuance of dividends in kind	\$	(190) \$			

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1 Summary of Significant Accounting Policies

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

On December 12, 2019, the Company completed a one-for-fifteen reverse stock split of its common stock. All shares and per share amounts included in the financial statements have been adjusted to reflect the effect of the reverse stock split. See Note 9.

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

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

Fiscal Year The Company's financial reporting year consists of either a 52 week or 53 week period ending on the last Saturday of the month of March. Fiscal year 2020 ended on March 28, 2020 resulting in a 52 week year. Fiscal year 2019 ended on March 30, 2019, which resulted in a 52 week year. All references to years in the consolidated financial statements relate to fiscal years rather than calendar years.

Leases

In February 2016, the Financial Accounting Standards Board ("FASB") issued ASU 2016-02 - Leases (ASC 842), which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e. lessees and lessors). The new standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification determines whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease, respectively. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. Leases with a term of 12 months or less are accounted for similar to guidance for operating leases existing prior to ASC 842. ASC 842 supersedes the previous leases standard, ASC 840 Leases. The Company adopted ASC 842 as of March 31, 2019. The new standard requires a modified retrospective transition approach for all leases existing at, or entered into after, the date of initial application, with an option to use certain transition relief. In July 2018, the FASB issued ASU No. 2018-11, Leases (Topic 842): Targeted Improvements, which amends ASC Topic 842 to provide another transition method, allowing a cumulative effect adjustment to the opening balance of retained earnings during the period of adoption. The Company has one long term office lease. The adoption of ASU 2016-02 on March 31, 2019 resulted in the recognition of right-of-use assets of approximately \$1.4 million, lease liabilities for operating leases of approximately \$1.8 million and no material impact to the Consolidated Statements of Operations or Cash Flows. See below for further information regarding the impact of the adoption of ASU 2016-02 on the Company's financial statements.

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

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

The Company generates revenue through the design, manufacture, and sale of products used in the defense industry to major prime defense contractors, the U.S. armed services and research institutes. There is generally one performance obligation in the Company's contracts with its customers. For highly engineered products, the customer typically controls the work in process as evidenced either by contractual termination clauses or by the Company's right to payment for costs incurred to date plus a reasonable profit for products or services that do not have an alternative use. In these circumstances, the performance obligation is the design and manufacturing service. As control transfers continuously over time on these contracts, revenue is recognized based on the extent of progress towards completion of the performance obligation using a cost-to-cost method. Engineering services are also satisfied over time and recognized on the cost-to-cost method. These types of revenue arrangements are typical for the Company's defense contracts within the Microsource segment for its RADAR filter products used in fighter jet aircrafts. For the sale of standard or minimally customized products, the performance obligation is the series of finished products which are recognized at the points in time the units are transferred to the control of the customer, typically upon shipment. This type of revenue arrangement is typical for our commercial contracts within the Giga-tronics segment for its Advanced Signal Generation and Analysis system products used for testing RADAR and Electronic Warfare ("EW") equipment.

Performance Obligations

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

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

The majority of the Company's contracts have a single performance obligation as the promise to transfer the individual goods or services is not separately identifiable from other promises in the contracts and, therefore, not distinct.

Transaction Price

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

Allocation of Consideration

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

Timing of Recognition

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

Changes in Estimates

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

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

Balance Sheet Presentation

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

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

Conversion of convertible preferred stock ASC 260-10-S99, Earnings Per Share, provides guidance on the accounting for induced conversions of convertible preferred stock and states that issuers should consider the guidance in ASC 470-20-40-13 through 40-17, Debt with conversion and other options, to determine whether a conversion of preferred stock is pursuant to an inducement offer. ASC 470-20-40-13 through 40-17 addresses the accounting for induced conversions of convertible debt (other than cash convertible debt instruments) that (1) occur pursuant to changed conversion privileges that are exercisable only for a limited period of time, (2) include the issuance of all of the equity securities issuable pursuant to conversion privileges included in the terms of the debt at issuance for each debt instrument that is converted and (3) involve any of the following:

- Reduction of the original conversion price (thereby resulting in the issuance of additional shares of stock)
- Issuance of warrants or other securities not provided for in the original conversion terms
- Payment of cash or other consideration (sometimes called a convertible stock sweetener) to those shareholders who convert during the specified time period. The additional consideration is usually offered to induce prompt conversion of the stock to another class of equity.

ASC 470-20-40-14 further explains that an induced conversion includes an exchange of a convertible debt instrument for equity securities or a combination of equity securities and other consideration, whether or not the exchange involves legal exercise of the contractual conversion privileges included in the terms of the debt.

If a conversion of preferred stock is an inducement offer pursuant to ASC 470, the fair value of the additional securities or other consideration issued to induce conversion should be subtracted from net income to arrive at income available to common stockholders in the calculation of EPS pursuant to ASC 260-10-S99-2. The deemed dividend is reflected on the face of the statement of operations as an increase in net loss or a decrease in net income to arrive at net income (loss) attributable to common shareholders. See Note 17.

New Accounting Standards

In June 2018, the FASB issued ASU 2018-07, "Improvements to Nonemployee Share-Based Payment Accounting," to simplify the accounting for share based transactions with nonemployees in which the grantor acquires goods or services to be used or consumed. Under the new standard, most of the guidance on recording share-based compensation granted to nonemployees will be aligned with the requirements for share-based compensation granted to employees. This standard was adopted in fiscal 2020, and did not have a material impact on our consolidated financial statements.

In February 2016, the FASB issued authoritative guidance under ASU 2016-02, Leases (Topic 842). ASU 2016-02 requires lessees to recognize right-of-use assets and lease liabilities for most leases on the balance sheet and to provide expanded disclosures about leasing arrangements. The Company adopted the standard effective March 31, 2019 using the optional transition method and did not restate comparative periods. There was no effect on accumulated deficit at adoption.

Practical expedients elected

The Company has elected to apply the package of practical expedients under ASU 2016-02 to (a) not reassess whether expired or existing contracts are or contain leases, (b) not reassess the lease classification for any expired or existing leases and (c) not reassess the accounting for initial direct costs. As a result, leases classified as operating leases prior to adoption of the new lease standard remain as operating leases and leases classified as capital leases prior to adoption of the new lease standard are now finance leases.

The adoption of the new leases standard resulted in the following adjustments to the consolidated balance sheet as of March 30, 2019 (in thousands):

	Balance at 3/30/2019	Adoption Adjustment	Balance at 3/31/2019
Assets:			
Right of use assets- Operating lease	\$ _	\$ 1,361	\$ 1,361
Right of use assets- Finance lease		49	49
Property and equipment, net (a)	49	(49)	_
Liabilities:			
Deferred rent (b)	\$ 71	\$ (71)	\$ _
Operating lease liability, current portion	_	337	337
Finance lease obligation, current portion	_	41	41
Capital lease obligation, current portion (c)	41	(41)	_
Long term deferred rent (d)	358	(358)	_
Long term obligations – capital lease (e)	19	(19)	_
Operating lease liability, non-current portion	_	1,453	1,453
Finance lease obligation, long-term portion	_	19	19

- (a) Represents net book value of capital lease assets reclassified to Finance right of use assets.
- (b) Represents current portion of deferred rent reclassified to Operating lease obligation, current portion.
- (c) Represents current portion of capital lease liability reclassified to Finance lease obligation current portion.
- (d) Represents noncurrent portion of deferred rent reclassified to Operating lease liability non-current portion.
- (e) Represents noncurrent portion of capital lease obligation reclassified to Finance lease obligation non-current portion.

Adoption of the standards related to leases had no impact to cash from or used in operating, financing, or investing activities on our consolidated cash flows statements.

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

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

Research and Development Research and development expenditures, which include the cost of materials consumed in research and development activities, salaries, wages and other costs of personnel engaged in research and development, costs of services performed by others for research and development on the Company's behalf and indirect costs are expensed as operating expenses when incurred. Research and development costs totaled approximately \$1.6 million and \$1.3 million for the years ended March 28, 2020 and March 30, 2019, respectively.

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

The Company reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If such review indicates that the carrying amount of an asset exceeds the sum of its expected future cash flows on an undiscounted basis, the asset's carrying amount would be written down to fair value. Additionally, the Company reports long-lived assets to be disposed of at the lower of carrying amount or fair value less cost to sell. As of March 28, 2020 and March 30, 2019, management believes there has been no impairment of the Company's long-lived assets.

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

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

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

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

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.

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

The cash flows resulting from the tax benefits resulting from tax deductions in excess of the compensation cost recognized for those options (excess tax benefits) are classified as cash flows from financing in the statements of cash flows. These excess tax benefits were not significant for the Company for the fiscal years ended March 28, 2020 or March 30, 2019.

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

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

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

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

Financial Instruments and Concentration of Credit Risk Financial instruments that potentially subject the Company to credit risk consist of cash, cash-equivalents and trade accounts receivable. The Company's cash-equivalents consist of overnight deposits with federally insured financial institutions. Concentration of credit risk in trade accounts receivable results primarily from sales to major customers. The Company individually evaluates the creditworthiness of its customers and generally does not require collateral or other security. At March 28, 2020, three customers combined accounted for 96% of consolidated gross accounts receivable. At March 30, 2019, three customers combined accounted for 97% of consolidated gross accounts receivable.

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

2 Cash and Cash-equivalents

Cash and cash-equivalents of \$657,000 and \$878,000 at March 28, 2020 and March 30, 2019, respectively, consisted of demand deposits with a financial institution that is a member of the Federal Deposit Insurance Corporation (FDIC). At March 28, 2020, \$407,000 of the Company's demand deposits exceeded FDIC insurance limits.

3 Inventories, net

Inventories, net consisted of the following:

	March 28,	March 30,
(Dollars in thousands)	2020	2019
Raw materials	\$ 890	\$ 759
Work-in-progress	1,828	1,523
Finished goods	263	57
Demonstration inventory	280	395
Total	\$ 3,261	\$ 2,734

4 Property, Plant and Equipment, net

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

	March 28,	March 30,
(Dollars in thousands)	2020	2019
Leasehold improvements	\$ 642	633
Machinery and equipment	3,599	4,333
Computer and software	681	681
Furniture and office equipment	196	227
Subtotal	5,118	5,874
Less: accumulated depreciation	(4,610)	(5,305)
Total	\$ 508 \$	569

5 Financed Receivables

On March 11, 2019, the Company entered into an Amended and Restated Business Financing Agreement (the "Restated Financing Agreement") with Western Alliance Bank, as successor to Bridge Bank. The Restated Financing Agreement amends, restates and replaces a credit agreement with Bridge Bank dated May 6, 2015 (as previously amended, the "Previous Financing Agreement") in its entirety.

Under the Restated Financing Agreement, Western Alliance Bank may advance up to 85% of the amounts of invoices issued by the Company, up to a maximum of \$2.5 million in aggregate advances outstanding at any time. The Restated Financing Agreement eliminates a \$500,000 non-formula borrowing base and an asset coverage ratio financial covenant included in the Previous Financing Agreement.

Under the Restated Financing Agreement, interest accrues on outstanding amounts at an annual rate equal to the greater of prime or 4.5% plus, in either case, one percent. The Company is required to pay certain fees, including an annual facility fee of \$14,700, to be paid in two equal semiannual installments. The Company's obligations under the Restated Financing Agreement are secured by a security interest in substantially all of the assets of the Company and any domestic subsidiaries, subject to certain customary exceptions. The Restated Financing Agreement has no specified term and may be terminated by either the Company or Western Alliance Bank at any time.

The Restated Financing Agreement contains customary events of default, including, among others: non-payment of principal, interest or other amounts when due; providing false or misleading representations and information; Western Alliance Bank failing to have an enforceable first lien on the collateral; cross-defaults with certain other indebtedness; certain undischarged judgments; bankruptcy, insolvency or inability to pay debts; and a change of control of the Company. Upon the occurrence and during the continuance of an event of default, the interest rate on the outstanding borrowings increases by 500 basis points and Western Alliance Bank may declare the loans and all other obligations under the Restated Financing Agreement immediately due and payable.

As of March 28, 2020 and March 30, 2019, the Company's total outstanding borrowings under the Restated Financing Agreement were \$527,468 and zero, respectively, and are included in Loans payable, net of discounts and issuance costs on the Consolidated Balance Sheet.

<u>6</u> Term Loan, Revolving Line of Credit and Warrants

On April 27, 2017, the Company entered into a \$1.5 million loan agreement with Partners For Growth ("PFG"), which was funded by PFG on April 28, 2017 (the "2017 Loan"). The 2017 Loan, which originally matured on April 27, 2019, provides for interest only payments during the term of the loan with principal and any accrued interest and fees due upon maturity. The 2017 Loan bears interest at a fixed aggregate per annum rate equal to 16% per annum, of which 9.5% per annum rate is payable monthly in cash and 6.5% per annum rate is accrued monthly and due upon maturity. In addition, the Company agreed to pay PFG a cash fee of up to \$100,000 payable upon maturity (the "back-end fee"), \$76,000 of which was earned on April 27, 2017, and \$24,000 of which is earned at the rate of \$1,000 per month on the first day of each month if the loan principal (or any amount thereof) is outstanding during any day of the prior month.

In December 2018, the Company and PFG agreed to modify the 2017 Loan Agreement to extend the maturity date from April 27, 2019 to November 1, 2019, to require the Company to pay all accrued interest on May 1, 2019 and to require the Company to make monthly prepayments of principal of \$75,000 and accrued interest from May 1, 2019 until maturity. The effectiveness of the modification was conditioned on the Company raising \$500,000 in additional equity capital. As of March 30, 2019, the Company had satisfied this condition.

On March 11, 2019, the Company and PFG agreed to further modify the 2017 Loan Agreement to extend the maturity date to March 1, 2020 and to add financial covenants requiring the Company to maintain a minimum tangible net worth and minimum revenues.

On June 28, 2019, the Company and PFG agreed to further modify the 2017 Loan Agreement to adjust the financial covenants requiring the Company to maintain a minimum tangible net worth and minimum revenues. At December 28, 2019, the Company did not meet a covenant in the amended 2017 Agreement with PFG requiring the Company to achieve minimum cumulative revenues of \$11 million for the first three quarters of its 2020 fiscal year. The Company's failure to comply with this covenant constituted an event of default under the agreement, entitling PFG to declare all outstanding amounts immediately due and payable. PFG waived this default on January 31, 2020.

On January 31, 2020, the Company and PFG agreed to further modify the 2017 Loan Agreement. The Amendment, among other things, provided for a fee of \$16,500; extended the maturity date of the loan from March 1, 2020 to March 1, 2021; required the Company make principal payments of \$75,000 on February 1, 2020 and \$57,700 on the first day of each month thereafter until maturity; provides for an annual interest rate of 16%, of which 9.5% is payable monthly and 6.5% is deferred until maturity or payoff; and adjusted and extended a modified minimum revenue financial covenant through the maturity date. The Amendment also contained the Lender's waiver of the Company's default arising from its failure to comply with the Loan Agreement's minimum revenue financial covenant for the calendar quarter ended December 31, 2019, which entitled the Lender to declare all outstanding amounts immediately due and payable.

As of March 28, 2020 and March 30, 2019, the Company's total outstanding loan balances were \$792,300 and \$1.8 million, respectively, and are included in Loans payable, net of discounts and issuance costs on the Consolidated Balance Sheet.

The Company anticipates it will need to achieve significant product shipments and resulting cash inflows and or seek additional funds through the issuance of new debt or equity securities to repay the 2017 Loan (including accrued interest and back end fees) in full upon maturity or otherwise enter into a refinancing agreement with PFG.

7 Fair Value

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

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

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

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

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 March 28, 2020 and March 30, 2019.

8 Sale of Common Stock

On November 8, 2019, the Company completed an underwritten public offering of 699,333 shares of its common stock at \$3.75 per share. The net proceeds from the offering after deducting underwriting discounts and commissions and offering expenses were approximately \$2.1 million. The Company's use of the net proceeds of this offering was for general corporate purposes, which included the repayment of debt. In connection with the offering, the Company granted the underwriter a warrant to purchase 20,980 shares of common stock at the price of \$4.50 per share. The warrant is immediately exercisable and has a five-year term.

In addition, on November 8, 2019, the Company completed a private exchange offer in which it issued an aggregate of 896,636 shares of common stock in exchange for 88,600 shares of its Series E preferred shares and the dividends thereon. As a result, 9,200 shares of Series E preferred stock with an aggregate liquidation preference of \$345,000 remained outstanding at March 28, 2020.

On March 11, 2020, the Company entered into Securities Purchase Agreements with two private investors for the sale of a total of 146,668 shares at the price of \$3.75 per share, for aggregate gross proceeds of \$550,004. The sales were completed and the shares of common stock were issued on March 11, 2020. Net proceeds to the Company after fees and expenses of the private placement were \$510,000.

9 Reverse Stock Split

On December 12, 2019, the Company amended its Articles of Incorporation and effected a 1-for-15 reverse split of its common stock.

The reverse stock split reduced the number of shares of common stock outstanding from 37,154,730 shares to 2,476,982 shares on December 12, 2019. The number of authorized shares of the Company's common stock was reduced in the same proportion from 200 million shares of common stock to 13,333,333 shares of common stock.

As a result of the reverse stock split, each of the Company's holders of common stock received one share of common stock for every 15 shares of common stock held immediately prior to the reverse stock split. No fractional shares were issued in connection with the reverse stock split and cash was paid in lieu of any fractional shares. The reverse stock split also reduced the number of shares of common stock issuable upon the conversion of the Company's outstanding shares of preferred stock and the exercise of its outstanding stock options and warrants in proportion to the ratio of the reverse stock split and caused a proportionate increase in the conversion and exercise prices of such preferred stock, stock options and warrants.

All share and per share amounts included in the financial statements and notes have been adjusted to reflect the effect of the reverse stock split.

10 Selling and Advertising Expenses

Selling expenses consist primarily of salaries to employees and commissions paid to various sales representatives and marketing agencies. Commission expense totaled \$15,000 and \$33,000 for fiscal 2020 and 2019, respectively. Advertising costs, which are expensed as incurred, totaled \$20,000 and zero for fiscal 2020 and 2019, respectively.

11 Significant Customers and Industry Segment Information

The Company has two reportable segments: Microsource and the Giga-tronics Division. Microsource's primary business is the design of custom Microwave Integrated Components as well as the production of MIC components using chip and wire assembly methods. Our Microsource Division offers a line of tunable, synthesized Band Reject Filters (BRF) for solving interference problems in RADAR/EW applications. Self-protection systems onboard high performance military aircraft often require RADAR filters to block electromagnetic interference generated by other onboard electronic systems, particularly the aircraft's main RADAR. These high-speed, tunable notch filters can quickly block interference from both continuous wave and wide bandwidth emissions. Using proprietary driver and phase lock technology, these filters offer tuning speeds that are up to ten times faster than traditional filter designs. We design these filters specifically for each application. Microsource's two largest customers are prime contractors for which it develops and manufactures RADAR filters used in fighter jet aircraft.

The Giga-tronics Division designs, manufactures and markets a family of functional test products for the RADAR and Electronic Warfare (RADAR/EW) segment of the defense electronics market. Our RADAR/EW test products are used to evaluate and improve the performance of RADAR/EW systems.

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

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

The tables below present information for fiscal years 2020 and 2019.

		Giga-tronics		
March 28, 2020 (Dollars in thousands)		Division	Microsource	Total
Revenue	\$	3,521	\$ 8,247	\$ 11,768
Interest expense, net		(252)	_	(252)
Depreciation		184	_	184
Income (loss) before income taxes		(3,392)	2,707	(685)
Assets		6,011	2,915	8,926
		Giga-tronics		
March 30, 2019 (Dollars in thousands)		Division	Microsource	Total
Revenue	\$	1,935	\$ 9,213	\$ 11,148
Interest expense, net		(607)	_	(607)
Depreciation		257	7	264
Income (loss) before income taxes		(4,521)	3,626	(895)
Assets		3,979	2,300	6,279
	43			

The Company's Giga-tronics Division and Microsource segments sell to agencies of the U.S. government and U.S. defense-related customers. In fiscal 2020 and 2019, U.S. government and U.S. defense-related customers accounted for 85% and 98% of sales, respectively. During fiscal 2020, the Boeing Company accounted for 45% of the Company's consolidated revenues and was included in the Microsource segment. A second customer, Lockheed Martin Corporation accounted for 19% of the Company's consolidated revenues during fiscal 2020 and was also included in the Microsource segment. A third customer, DFAS accounted for 18% of the Company's consolidated revenues during fiscal 2020 and was included in the Giga-tronics Division.

During fiscal 2019, the Boeing Company accounted for 57% of the Company's consolidated revenues and was included in the Microsource segment. A second customer, Lockheed Martin Corporation accounted for 26% of the Company's consolidated revenues during fiscal 2019 and was also included in the Microsource segment.

Export sales accounted for 1% and 1% of the Company's sales in fiscal 2020 and 2019, respectively. Export sales by geographical area for these fiscal years are shown below (Dollars in thousands):

	March 28, 2020	March 30, 2019
Europe	\$ 13	\$ 14
Asia	10	12
Rest of world	 110	68
Total	\$ 133	\$ 94

12 Loss per Common Share

The stock options, restricted stock, convertible preferred stock and warrants not included in the computation of diluted earnings per share (EPS) is a result of the Company's net loss and, therefore, the effect of these instruments would be anti-dilutive (in thousands).

	Fiscal Years Ended		
	March 28,	March 30,	
	2020	2019	
Stock options	241	182	
Restricted stock awards	20	22	
Convertible preferred stock	180	780	
Warrants	157	230	
	598	1,214	

13 Income Taxes

Following are the components of the provision for income taxes:

Fiscal years ended (in thousands)	Marc	,	March 30, 2019
Current			
Federal	\$	- \$	-
State		2	42
		2	42
Deferred			
Federal		123	2
State		40	39
		163	41
Change in liability for uncertain tax positions		(9)	1
Change in valuation allowance		(154)	(42)
Provision for income taxes	\$	2 \$	42

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

Fiscal years ended	March 28, 2020	March 30, 2019
(in thousands)		
Net operating loss carryforwards	\$ 11,568	\$ 11,365
Income tax credits	365	349
Inventory reserves and additional costs capitalized	865	795
Fixed asset depreciation	23	17
Accrued vacation	55	49
Accrued bonuses	=	64
Accrued warranty	9	29
Accrued commissions	36	71
Deferred rent	-	21
Allowance for doubtful accounts	2	2
Non-qualified stock options	91	81
Unrealized warrant gain	(33)	(33)
State tax benefit	(8)	9
Total deferred tax assets	12,973	12,819
Valuation allowances	(12,973)	(12,819)
	\$ -	\$ -

The following summarizes the difference between the income tax expense and the amount computed by applying the statutory federal income tax rates of 21% for the years ended March 28, 2020 and March 30, 2019, to income before income tax. The items comprising these differences consisted of the following for the fiscal years ended March 28, 2020 and March 30, 2019:

Year Ended (in thousands except percentages)

	March 28, 202	0	March 30,201	19
Statutory federal income tax (benefit)	\$ (164)	21.0 % \$	(210)	21.0%
Valuation allowance	154	(19.8)	(42)	4.2
State income tax, net of federal benefit	(54)	6.9	(70)	7.0
Net operating loss expiration	-	0	39	(3.9)
Non tax-deductible expenses	81	(10.4)	(15)	1.5
Tax credits generated	(18)	2.3	(2)	0.2
Adoption of ASC 606 adjustment	-	0	329	(32.9)
Other	 3	(0.5)	13	(1.3)
Effective income tax	\$ 2	(0.5%) \$	42	(4.2%)

The increase in valuation allowance from March 28, 2020 to March 30, 2019 was \$154,000.

As of March 28, 2020, the Company had pre-tax federal net operating loss carryforwards of \$47,040,000 and state net operating loss carryforwards of \$24,198,000 available to reduce future taxable income. The federal and state net operating loss carryforwards begin to expire from fiscal 2022 through 2038 and from 2029 through 2039, respectively. The federal net operating loss amount of \$740,000 from the tax year ended March 28, 2020 will have an indefinite life. Utilization of net operating loss carryforwards may be subject to annual limitations due to certain ownership change limitations as required by Internal Revenue Code Section 382. In addition, the TJC Act imposes new limitations on the utilization of losses incurred in tax years beginning after December 31, 2017. Legislation under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") passed in 2020 temporarily suspends the limitation on losses for tax years beginning before January 1, 2021. The federal income tax credits begin to expire from 2032 through 2037 and state income tax credit carryforwards are carried forward indefinitely.

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

As of March 28, 2020, the Company recorded unrecognized tax benefits of \$132,000 related to uncertain tax positions. The unrecognized tax benefit is netted against the non-current deferred tax asset on the Consolidated Balance Sheet. The Company has not recorded a liability for any penalties or interest related to the unrecognized tax benefits.

The Company files U.S federal, California and New Hampshire state tax returns. The Company is generally no longer subject to tax examinations for years prior to the fiscal year 2015 for federal purposes and fiscal year 2014 for California purposes, except in certain limited circumstances.

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

	Fis	Fiscal Year 2020		fiscal Year 2019
Balance as of beginning of year	\$	123,000	\$	122,000
Increase based on current year tax positions		9,000		1,000
Reductions for prior year tax positions		<u>-</u>		<u> </u>
Balance as of end of year	\$	132,000	\$	123,000

The total amount of interest and penalties related to unrecognized tax benefits at March 28, 2020 is not material. The amount of tax benefits that would impact the effective rate, if recognized, is not expected to be material. The Company does not anticipate any significant changes with respect to unrecognized tax benefits within the next twelve (12) months.

14 Stock based Compensation and Employee Benefit Plans

The Company maintains a 2018 Equity Incentive Plan providing for the issuance of up to 166,667 shares of common stock upon the exercise of options, stock awards and grants. With the adoption of the 2018 Equity Incentive Plan, no further awards will be issued under the Company's 2005 Equity Incentive Plan, though all awards under the 2005 Equity Incentive Plan that are outstanding will continue to be governed by the terms, conditions and procedures set forth in the plan and any applicable award agreement. Option grants under the Company's 2000 Stock Option Plan are no longer available.

Outstanding options 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 while providing services under a service arrangement in the case of non-employees) or within a certain period after termination of employment or service arrangement in the case of non-employees. 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 March 28, 2020, no SARs have been granted under any option plan. As of March 28, 2020, there were 28,493 shares of common stock available for issuance of additional awards under the 2018 Equity Incentive Plan. All outstanding options have a ten-year life from the date of grant. The Company records compensation cost associated with stock based compensation equivalent to the estimated fair value of the awards over the requisite service period.

Stock Options

The weighted average grant date fair value of stock options granted during the fiscal years ended March 28, 2020 and March 30, 2019 was \$4.98 and \$3.75, respectively, and was calculated using the following weighted-average assumptions:

	March 28,	March 30,
Fiscal years ended	2020	2019
Dividend yield	_	_
Expected volatility	105%	96%
Risk-free interest rate	2.21%	2.79%
Expected term (years)	8.35	8.35

A summary of the changes in stock options outstanding for the fiscal years ended March 28, 2020 and March 30, 2019 is presented below:

			Weighted	
		Weighted	Average	
		Average	Remaining	
		Exercise	Contractual	Aggregate
(Dollars in thousands except share prices)	Shares	Price per share	Term (Years)	Intrinsic Value
Outstanding at March 31, 2018	98,580	\$ 8.40	8.0	\$ _
Granted	100,267	4.65	9.6	_
Forfeited / Expired	(16,481)	10.35		
Outstanding at March 30, 2019	182,366	\$ 6.15	8.4	\$ _
Granted	73,880	4.98	9.2	
Forfeited / Expired	(15,488)	5.13		
Outstanding at March 28, 2020	240,758	\$ 5.86	7.9	\$ _
Exercisable at March 28, 2020	87,242	\$ 7.51	6.2	\$ _
	_			
At March 28, 2020, expected to vest in the future	196,846	\$ 6.07	7.7	\$ _
	· ·			

As of March 28, 2020, there was \$134,322 of total unrecognized compensation cost related to non-vested options granted under the 2005 and 2018 Plans and outside of the Plans. That cost is expected to be recognized over a weighted average period of 2.7 years and will be adjusted for subsequent changes in estimated forfeitures. There were 48,956 and 14,093 options vested during the fiscal years ended March 28, 2020 and March 30, 2019, respectively. The total fair value of options vested during the fiscal years ended March 28, 2020 and March 30, 2019 was \$206,255 and \$90,000, respectively. There were no exercises in fiscal 2020 and 2019. Stock based compensation cost recognized in operating results for the fiscal years ended March 28, 2020 and March 30, 2019 totaled \$213,000 and \$120,000, respectively.

Restricted Stock

The Company granted 10,000 restricted awards during the fiscal year ended March 28, 2020. The Company granted 20,667 restricted awards during fiscal 2019. The restricted stock awards are considered fixed awards as the number of shares and fair value at the grant date are amortized over the requisite service period net of estimated forfeitures. As of March 28, 2020, there was \$24,100 of total unrecognized compensation cost related to non-vested awards. That cost is expected to be recognized over a weighted average period of 0.995 years and will be adjusted for subsequent changes in estimated forfeitures. Compensation cost recognized for restricted and unrestricted stock for fiscal 2020 and fiscal 2019 totaled \$88,000 and \$125,000, respectively.

A summary of the changes in non-vested restricted stock awards outstanding for the fiscal years ended March 28, 2020 and March 30, 2019 is presented below:

		Weighted
		Average Grant
	Shares	Date Fair Value
Non-vested at March 31, 2018	19,997 \$	9.75
Granted	20,667	4.65
Vested	(16,667)	4.80
Forfeited or cancelled	(1,654)	11.85
Non-vested at March 30, 2019	22,343 \$	8.40
Granted	10,000	3.97
Vested	(21,009)	8.25
Forfeited or cancelled	(1,334)	12.00
Non-vested at March 28, 2020	10,000 \$	3.97

401(k) Plan The Company has established a 401(k) plan which covers substantially all employees. Participants may make voluntary contributions to the plan for up to 100% of their defined compensation. The Company matches a percentage of the participant's contributions in accordance with the plan. Participants vest ratably in Company contributions over a four-year period. Company contributions to the plan for fiscal 2020 and 2019 were approximately \$22,000 and \$18,000, respectively.

15 Commitments and Contingencies

Operating leases

Building – On January 5, 2017, the Company entered into a seventy-seven-month commercial building lease agreement for a 23,873 square feet facility in Dublin, California which began on April 1, 2017. The Company's principal executive offices along with our marketing, sales, and engineering offices and manufacturing operations are located in the Dublin facility.

In December 2018, the Company entered into a lease agreement for an additional 1,200 square foot facility for certain engineering personnel located in Nashua, New Hampshire, which began on February 1, 2019 and expires on January 31, 2022. Effective March 1, 2020, we amended and replaced in its entirety the original Nashua lease agreement to increase the facility size to 2,400 square feet and extend its expiration to February 28, 2023.

Per the terms of the Company's lease agreements, the Company does not have any residual value guarantees. In calculating the present value of the lease payments, the Company has elected to utilize its incremental borrowing rate. The Company has elected for facility operating leases to not separate each lease component from its associated non-lease components. The building lease includes variable payments (i.e. common area maintenance) which are charged and paid separately from rent based on actual costs incurred and therefore are not included in the right-of-use asset and liability but reflected in operating expense in the period incurred.

Lease costs

For the fiscal year ended (in thousands):

for the fiscal year ended (in thousands):		
		March 28,
	Classification	2020
Operating lease costs	Operating expenses	\$ 518
Finance lease:		
Amortization of lease asset	Depreciation and amortization	34
Interest on lease liability	Interest expense	5
Total lease costs		\$ 557

Other information (in thousands except weighted average amounts):

For the fiscal year ended March 28, 2020	Operating leases Fir		ses
Operating cash used for leases	\$ 572		_
Financing cash used for leases	_	\$	46
Weighted-average remaining lease term	3.39		0.46
Weighted average discount rate	6.50%)	12.00%

Future lease payments as of March 28, 2020 were as follows (in thousands):

	Operating leases	Finance leases	Total
2021	\$ 488	\$ 11	\$ 499
2022	503	20	523
2023	515	_	515
2024	209	_	209
Thereafter	_	_	_
Total future minimum lease payments	1,715	31	1,746
Less: imputed interest	(174)	(11)	(185)
Present value of lease liabilities	\$ 1,541	\$ 20	\$ 1,561

16 Warranty Obligations

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

	March 28,	March 30,
(In thousands)	2020	2019
Balance as of beginning of year	\$ 104	\$ 164
Provision, net	(58)	(7)
Warranty costs incurred	(12)	(53)
Balance as of end of year	\$ 34	\$ 104

17 Preferred Stock and Warrants

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

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

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

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

Each share of Series B, Series C and Series D Preferred Stock is convertible into one hundred shares of the Company's common stock. In connection with the preferred stock issuance described above, the Company issued to the investor warrants to purchase a total of 1,017,405 common shares at an exercise price of \$1.43 per share. These warrants were exercised in February 2015, and May 2015. The Company received funds from Alara in separate closings dated February 16, 2015 and February 23, 2015. Alara exercised a total of 1,002,818 of its existing Series C and Series D warrants to purchase common shares, all of which had an exercise price of \$1.43 per share for total cash proceeds of \$1,434,000, which was recorded net of \$42,000 of stock issuance costs. As part of the consideration for this exercise, the Company sold to Alara two new warrants to purchase an additional 898,634 and 194,437 common shares at an exercise price of \$1.78 and \$1.76 per share, respectively, for a total purchase price of \$137,000 or \$0.125 per share. The new warrants have a term of five years and may be paid in cash or through a cashless net share settlement. The Company and Alara amended the remaining 14,587 warrants as part of the February closings. On May 14, 2015, Alara exercised the remaining 14,587 warrants by acquiring 7,216 of shares of the Company's common stock through a cashless net share settlement.

On December 31, 2018, Alara Capital AVI II, LLC effected an in-kind distribution, without consideration, of all of its shares of common stock, convertible preferred stock and warrants of Giga-tronics Incorporated ("Issuer") to its limited partners of their respective interests of the Company's securities held by Alara Capital AVI II, LLC in connection with the wind-up and dissolution of Alara Capital AVI II, LLC. As a result, Alara Capital AVI II, LLC no longer beneficially owns more than 5% of the common stock.

Series E Senior Convertible Voting Perpetual Preferred Stock

On March 26, 2018, the Company entered into a Securities Purchase Agreement for the sale of 42,800 shares of a newly designated series of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock ("Series E Shares") to approximately 15 private investors. The sale was completed and the Series E Shares were issued on March 28, 2018.

Holders of Series E Shares are entitled to receive, when, as and if declared by the Company's Board of Directors, cumulative preferential dividends, payable semiannual in cash at a rate per annum equal to 6.0% of the initial purchase price of \$25.00 per share or in-kind (at the Company's election) through the issuance of shares of the Company's common stock, based on the 10 day volume weighted average price of the common stock. The deemed dividend is reflected on the face of the statement of operation as an increase in net loss or a decrease in net income to arrive at net income (loss) attributable to common shareholders.

The purchase price for each Series E Share was \$25.00. Gross proceeds received by the Company were approximately \$1.095 million (the "Placement"). Net proceeds to the Company after fees and expenses of the Placement were approximately \$1.0 million. Placement agent fees incurred in connection with the transaction were 5% of gross proceeds or approximately \$57,000 in cash, plus warrants to purchase 5% of the number of common shares into which the Series E shares can be converted (14,867 shares) at an exercise price of \$3.75 per share.

During the 2019 fiscal year, the Company issued and sold an additional 56,200 Series E Shares for the price of \$25.00 per share, resulting in gross proceeds of \$1,405,000. Net proceeds from sales of Series E Shares during the 2019 fiscal year were approximately \$1.2 million after fees and expenses of approximately \$212,000. Placement agent fees incurred in connection with the transaction were 5% of gross proceeds or approximately \$56,875 in cash, plus warrants to purchase 5% of the number of common shares into which the Series E shares can be converted (6.67 shares) at an exercise price of \$3.75 per share.

For the twelve months ended March 28, 2020, no additional Series E shares were issued.

Series E Exchange

The Company completed a private exchange offer on November 7, 2019, issuing an aggregate of 896,636 shares of common stock in exchange for 88,600 shares of Series E Preferred Stock and the dividends accrued thereon. The shares of common stock to be issued in the exchange were issued in reliance on the exemption from registration set forth in Section 3(a)(9) of the Securities Act of 1933 (the "Securities Act"), though other exemptions may be available.

The table below presents information for the fiscal years ended March 28, 2020 and March 30, 2019:

Preferred Stock

As of March 28, 2020 and March 30, 2019

				Liquidation
	Designated	Shares	Shares	Preference
	Shares	Issued	Outstanding	(in thousands)
Series B	10,000.00	9,997.00	9,245.13	\$ 2,136
Series C	3,500.00	3,424.65	3,424.65	500
Series D	6,000.00	5,111.86	5,111.86	731
Series E	100,000.00	100,000.00	9,200.00	345
Total at March 28, 2020	119,500.00	118,533.51	26,981.64	\$ 3,712

				Liquidation
	Designated	Shares	Shares	Preference
	Shares	Issued	Outstanding	(in thousands)
Series B	10,000.00	9,997.00	9,997.00	\$ 2,309
Series C	3,500.00	3,424.65	3,424.65	500
Series D	6,000.00	5,111.86	5,111.86	731
Series E	100,000.00	100,000.00	98,400.00	3,690
Total at March 30, 2019	119,500.00	118,533.51	116,933.51	\$ 7,230

18 COVID-19 (Coronavirus)

On January 30, 2020, the World Health Organization ("WHO") announced a global health emergency because of a new strain of coronavirus ("COVID-19") and in March 2020 classified the outbreak as a pandemic. In March 2020, the President of the United States and the Governor of California declared a state of emergency, based on the rapid increase in COVID-19 cases including in California. Since March 2020, with the spread of the coronavirus, we have implemented a number of directives to ensure the safety of our personnel and the continuity of our operations.

Recently, COVID-19 has caused significant disruptions to the global, national and local economy. The overall impact of COVID-19 on the California economy is not known and cannot be predicted at this time. While the disruption is currently expected to be temporary, there is uncertainty around the duration and the total economic impact. If this situation is prolonged, this could cause delays in our business and could have a short or long term adverse impact, possibly material, on the Company's future financial condition, liquidity, and results of operations.

19 Subsequent Events

On April 23, 2020, the Company borrowed \$786,200 from Western Alliance Bank (the "Loan") pursuant to the Paycheck Protection Program (the "PPP") under the CARES Act.

The Loan is evidenced by a promissory note dated April 21, 2020 (the "Promissory Note") and matures on April 23, 2022. The Promissory Note provides that the Loan bears interest at a rate of 1.0% per annum. Principal and interest are payable monthly commencing on November 1, 2020 and may be prepaid by the Company at any time prior to maturity with no prepayment penalties. The Promissory Note contains other customary terms, including representations, events of defaults and remedies.

A portion of the principal and accrued interest under the Promissory Note is forgivable by the U.S. Small Business Administration after eight weeks if the Company uses the Loan proceeds for certain purposes designated in the CARES Act, including payroll costs (as defined in the CARES Act), rents and utilities during the eight weeks following the origination of the Loan ("Eligible Purposes") and otherwise complies with PPP requirements. In order to obtain forgiveness of the Loan, the Company must submit a request and provide satisfactory documentation regarding its compliance with applicable requirements. The Company must repay any unforgiven principal amount of the Promissory Note, with interest. The Company intends to use a significant portion of the proceeds of the Loan for Eligible Purposes and to seek forgiveness for those amounts, although the Company may take action that could cause some or all of the Loan to become ineligible for forgiveness.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Giga-tronics Incorporated Dublin, California

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Giga-tronics Incorporated and subsidiary (collectively the "Company") as of March 28, 2020 and March 30, 2019, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the two years in the period ended March 28, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company *as of* March 28, 2020 and March 30, 2019, and the consolidated results of its operations and its cash flows for each of the two years in the two-year period ended March 28, 2020, in conformity with U.S. generally accepted accounting principles.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for leases from March 31, 2019 due to the adoption of Accounting Standards Update (ASU) No. 2016-02, Leases (Topic 842).

Basis for Opinion

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

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

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

Emphasis of Matter- COVID-19

As described in Note 18 to the consolidated financial statements, the World Health Organization has declared COVID-19 a global pandemic leading to broader global economic uncertainties. The measures taken by government agencies to slow the progression of the disease is uncertain and may adversely affect the Company's result of operations, cash flow and financial position. Our opinion is not modified with respect to this matter.

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

/s/ Armanino LLP San Ramon, California

May 28, 2020

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

None

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 as amended (the "Exchange Act")) that are designed to ensure that information required to be disclosed in the Company's reports under the Exchange Act, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including the Company's Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. The Company periodically reviews the design and effectiveness of its disclosure controls and internal control over financial reporting. The Company makes modifications to improve the design and effectiveness of its disclosure controls and internal control structure, and may take other corrective action, if its reviews identify a need for such modifications or actions. The Company's disclosure controls and procedures are designed to provide reasonable assurance of achieving their objectives.

As of the end of the period covered by this Form 10-K, an evaluation was completed under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, regarding the design and effectiveness of our disclosure controls and procedures. Based on this evaluation, our management, including our principal executive officer and principal financial officer, has concluded that our disclosure controls and procedures were effective as of March 28, 2020.

Report of Management on Internal Control over Financial Reporting

Management of Giga-tronics is responsible for establishing and maintaining adequate internal control over financial reporting for the Company, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. The Company's management, under the supervision of the Chief Executive Officer and Chief Financial Officer, has assessed the effectiveness of the Company's internal control over financial reporting as of March 28, 2020. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its 2013 Internal Control-Integrated Framework. Our internal control over financial reporting includes policies and procedures designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with United States generally accepted accounting principles and that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a
 material effect on the financial statements.

Based on the above described procedures and actions taken, the Company's management, including the Chief Executive Officer and Chief Financial Officer have concluded that as of March 28, 2020, the Company's internal control over financial reporting was effective based on the criteria described in the 2013 "COSO Internal Control – Integrated Framework."

Management's assessment of the effectiveness of the Company's internal control over financial reporting as of March 28, 2020, has not been audited by the Company's independent registered public accounting firm. Management's report is not subject to attestation by the Company's independent registered public accounting firm pursuant to the rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this Annual Report.

Changes in Internal Control

There were no changes in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fiscal quarter ended March 28, 2020, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTOR, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding the directors, executive officers and corporate governance of the Company is incorporated by reference to the Company's Proxy Statement for its 2020 Annual Meeting of Shareholders, to be filed no later than 120 days after the close of the fiscal year ended March 28, 2020.

We have adopted a code of ethics that applies to our directors, our chief executive officer, our senior financial officers and our other officers and employees. The code of ethics is posted on our website under the Governance portion of the Investor Relations section at https://investor.gigatronics.com/governance-docs.

ITEM 11. EXECUTIVE COMPENSATION

Information regarding the Company's compensation of its executive officers is incorporated herein by reference to the Company's Proxy Statement for its 2020 Annual Meeting of Shareholders, to be filed no later than 120 days after the close of the fiscal year ended March 28, 2020.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS

Information regarding security ownership of certain beneficial owners and management and related shareholder matters is incorporated by reference to the Company's Proxy Statement for its 2020 Annual Meeting of Shareholders, to be filed no later than 120 days after the close of the fiscal year ended March 28, 2020.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Information concerning certain relationships, related transactions and director independence is incorporated herein by reference to the Company's Proxy Statement for its 2020 Annual Meeting of Shareholders, to be filed no later than 120 days after the close of the fiscal year ended March 28, 2020.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information concerning the Company's principal accountants is incorporated by reference to the Company's Proxy Statement for its 2020 Annual Meeting of Shareholders, to be filed no later than 120 days after the close of the fiscal year ended March 28, 2020.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENTS SCHEDULES

- (a) The following consolidated financial statements of Giga-tronics Incorporated and the related report of independent registered public accounting firm are included in Item 8 of this report.
- (b) The following exhibits are filed with this report:
- 3.1 Articles of Incorporation of the Company, as amended (incorporated by reference to Exhibit 3.1 to the Company's Form 10-K for the fiscal year ended March 27, 1999)
- 3.2 Amendment to Articles of Incorporation of the Company (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed on December 13, 2019)
- 3.3 Certificate of Determination of Preferences of Preferred Stock Series A of the Company (incorporated by reference to Exhibit 3.1 to the Company's Form 10-K for the fiscal year ended March 27, 1999)
- 3.4 Certificate of Determination of Series B Convertible Voting Perpetual Preferred Stock of the Company (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed on November 14, 2011)
- 3.5 Certificate of Determination of Series C Convertible Voting Perpetual Preferred Stock of the Company (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed on February 25, 2013)
- 3.6 Certificate of Determination of Series D Convertible Voting Perpetual Preferred Stock of the Company (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed on July 3, 2013)
- 3.7 <u>Certificate of Determination of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock of the Company (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed on March 30, 2018)</u>
- 3.8 Certificate of Amendment to Certificate of Determination of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock of the Company (incorporated by reference to Exhibit 3.1 to the Company's Form 8-K filed on August 20, 2018)
- 3.9 Certificate of Amendment to Certificate of Determination of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock of the Company (incorporated by reference to Exhibit 3.3 to the Company's Form 8-K filed on November 27, 2018)
- 3.10 Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 3.2 to the Company's Form 10-K for the fiscal year ended March 29, 2008)
- 4.1 <u>Description of Common Stock</u>
- Form of Indemnification Agreement between the Company and each of its directors and officers (incorporated by reference to Exhibit 10.1 to the Company's Form 10-K for the fiscal year ended March 27, 2010)
- 10.2 2005 Equity Incentive Plan (incorporated by reference to Attachment A to the Company's Proxy Statement on Form DEF 14A filed on July 21, 2005)*
- 10.3 Warrant to Purchase Shares of Common Stock between the Company and Alara Capital AVI II, LLC dated February 16, 2015 (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8- K filed on February 20, 2015)
- 10.4 Warrant to Purchase Shares of Common Stock between the Company and Alara Capital AVI II, LLC dated February 23, 2015 (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8- K filed on February 27, 2015)
- 10.5 Investor Rights Agreement between the Company and Alara Capital AVI II, LLC dated November 10, 2011 (incorporated by reference to Exhibit 10.3 to the Company's Form 8-K filed on November 14, 2011)
- 10.6 Severance Agreement between the Company and John R. Regazzi dated June 3, 2010 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-O filed on August 9, 2010) *
- 10.7 Severance Agreement between the Company and Daniel Kirby dated November 26, 2019
- 10.8 Severance Agreement between the Company and Traci Mitchell dated March 21, 2019 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on March 26, 2019) *
- 10.9 Severance Agreement between the Company and Armand Pantalone dated March 21, 2019 (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed on March 26, 2019) *
- 10.10 Severance Agreement between the Company and Lutz Henckels dated April 11, 2019 (incorporated by reference to the Exhibit 10.19 to Company's Form 10-K filed on May 30, 2019)*
- 10.11 Lease Agreement between the Company and SF II Creekside LLC dated January 5, 2017 (incorporated by reference to Exhibit 10.17 to the Company's Form 10-K for the year ended March 31, 2018).

- 10.12 Form of Warrant Agreement dated January 29, 2016, between the Company and individual investors (incorporated by reference to Exhibit 10.2 to the Company's Registration Statement on Form S-3 (File No. 333-210157) filed on March 14, 2016.
- 10.13 Loan and Security Agreement between the Company and Partners for Growth V, L.P. dated April 27, 2017 (incorporated by reference to Exhibit 10.18 to the Company's Form 10-K for the year ended March 31, 2018).
- 10.14 Conditional Waiver and Modification to Loan and Security Agreement dated March 26, 2018 between the Company and Partners For Growth (incorporated by reference to Exhibit 10.24 to the Company's Form 10-K for the year ended March 31, 2018)
- 10.15 Modification No. 2 to Loan and Security Agreement dated December 12, 2018 between the Company and Partners for Growth V. L.P. (incorporated by reference to the Exhibit 10.3 to Company's Form 8-K filed on March 14, 2019)
- 10.16 Modification No. 3 to Loan and Security Agreement dated March 11, 2019 between the Company and Partners for Growth V. L.P. (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on March 14, 2019)
- Modification No. 4 to Loan and Security Agreement dated June 28, 2019 between the Company and Partners for Growth V. L.P. (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on August 8, 2019)

 Modification No. 5 to Loan and Security Agreement dated January 31, 2020 between the Company and Partners for Growth V. L.P. (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on February 4, 2020).
- 10.18 Amended and Restated Business Financing Agreement between the Company, Microsource, Inc. and Western Alliance Bank (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed on March 14, 2019)
- 10.19 Stock Option Award Agreement between the Company and Lutz Henckels dated June 6, 2018 (incorporated by reference to Exhibit 10.25 to the Company's Form 10-K for the year ended March 31, 2018)*
- 10.20 2018 Equity Incentive Plan (incorporated by reference to Attachment A to the Company's Proxy Statement on Form DEF 14A filed on July 30, 2018) *
- 10.21 Form of Option Agreement for Directors under 2018 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company's Form 8-K filed on February 6, 2019)*
- 10.22 Form of Option Agreement for Certain Grants to Executive Officers under 2018 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 of the Company's Form 8-K filed on February 6, 2019)*
- 10.23 Form of Option Agreement under 2018 Equity Incentive Plan (incorporated by reference to Exhibit 10.3 of the Company's Form 8-K filed on February 6, 2019)*
- 10.25 Form of Underwriter's Warrant (incorporated by reference to Exhibit 4.1 to the Amendment No. 1 to the Company's Registration Statement on Form S-1 filed on October 29, 2019)
- 10.26 Promissory Note issued to Western Alliance Bank dated April 20, 2020 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on April 27, 2020)
- 21 Significant Subsidiaries
- 23.1 Consent of Armanino LLP
- 31.1 Certification of Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2 Certification of Principal Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002.
- 32.1 Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 32.2 Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 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
- * Management contract or compensatory plan or arrangement.
- ** XBRL information is furnished and not filed or a part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.

SIGNATURES

In accordance with the requirements of Section 13 or 15(d) of the Securities Exchange Act, the Registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

GIGA-TRONICS INCORPORATED

/s/ JOHN R. REGAZZI May 28, 2020
Chief Executive Officer Date

In accordance with the requirements of the Securities Exchange Act, this annual report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

/s/ WILLIAM J. THOMPSON William J. Thompson	Chairman of the Board of Directors	May 28, 2020 Date
/s/ JOHN R. REGAZZI John R. Regazzi	Chief Executive Officer and Director	May 28, 2020 Date
/s/ LUTZ P. HENCKELS Lutz P. Henckels	Chief Financial Officer and Director (Principal Financial Officer)	May 28, 2020 Date
/s/ TRACI K. MITCHELL Traci K. Mitchell	Corporate Controller (Principal Accounting Officer)	May 28, 2020 Date
/s/ GORDON L. ALMQUIST Gordon L. Almquist	Director	May 28, 2020 Date
/s/ JAMIE WESTON Jamie Weston	Director	May 28, 2020 Date

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

As of March 28, 2020, Giga-tronics Incorporated (the "Company," "we," "us," and "our") had one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), Common Stock, without par value ("Common Stock").

DESCRIPTION OF COMMON STOCK

The following description of our Common Stock is a summary and does not purport to be complete. It issubject to and qualified in its entirety by reference to our Articles of Incorporation, as amended (the "Articles of Incorporation") and our Bylaws, both of which are incorporated by reference to our Annual Report on Form 10-K of which this Exhibit is a part. We encourage you to read the Articles Incorporation, the Bylaws and the applicable provisions of the California General Corporation Law for additional information.

Shares Authorized

Our Articles of Incorporation authorize 13,333,333 shares of common stock, no par value, of which 757,367 shares were outstanding as of March 28, 2020.

Fully Paid and Non-Assessable

The outstanding shares of our Common Stock are fully paid and non-assessable and do not have any preemptive or similar rights.

Voting Rights

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

Dividends, Distributions and Preferences\

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

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

Trading Market

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

Anti-Takeover Provisions

Our Articles of Incorporation authorize up to 1,000,000 undesignated shares of preferred stock, no par value per share, which are typically referred to as "blank check" preferred stock. This term refers to stock for which the rights and restrictions are determined by the board of directors of a corporation. Except in limited circumstances, our Articles of Incorporation authorize our board of directors to issue new shares of common stock or preferred stock without further shareholder action. Our Articles of Incorporation give our board of directors the authority at any time to divide the authorized but undesignated unissued shares of preferred stock into series and to determine the designations, number of shares, relative rights, preferences and limitations of a new series of preferred stock.

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

Transfer Agent and Registrar

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

GIGA-TRONICS INCORPORATED

SEVERANCE AGREEMENT

This Severance Agreement (the "Agreement") is made and entered into by and between DANIEL DIRBY (Employee") and Giga-tronics Incorporated, a California Corporation (the "Company"), effective as of November 26, 2019 (the 'Effective Date"). This Agreement supersedes any existing Severance Agreement or other agreement providing similar benefits between Employee and the Company.

RECITALS

- 1. It is expected that the Company from time to time will consider the possibility of an acquisition by another company or other change of control. The Board of Directors of the Company (the "Board") recognizes that such consideration can be a distraction to Employee and can cause Employee to consider alternative employment opportunities. The Board has determined that it is in the best interests of the Company and its stockholders to assure that the Company will have the continued dedication and objectivity of Employee, notwithstanding the possibility, threat or occurrence of a Change of Control.
- 2. The Board believes that it is in the best interests of the Company and its stockholders to provide Employee with an incentive to continue his or her employment and to motivate Employee to maximize the value of the Company for the benefit of its stockholders.
- 3. The Board believes that it is imperative to provide Employee with certain benefits upon Employee's termination of employment without cause or in connection with a Change of Control. These benefits will provide Employee with enhanced financial security and incentive and encouragement to remain with the Company.
 - 4. Certain capitalized terms used in the Agreement are defined in Section 5 below.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

- 1. <u>Term of Agreement</u>. This Agreement will terminate upon the date that all of the obligations of the parties hereto with respect to this Agreement have been satisfied.
- 2. At-Will Employment. The Company and Employee acknowledge that Employee's employment is and will continue to be at-will, as defined under applicable law, except as may otherwise be specifically provided under the terms of any written formal employment agreement or offer letter between the Company and Employee (an "Employment Agreement"). If Employee's employment terminates for any reason, Employee will not be entitled to any payments, benefits, damages, awards or compensation other than as provided by this Agreement, including any payments or benefits Employee would otherwise be entitled to under his or her Employment Agreement.

3. Termination Benefits.

(a) <u>Involuntary Termination other than for Cause, Death or Disability.</u> If the Company (or any parent or subsidiary of the Company employing Employee) terminates Employee's employment with the Company (or any parent or subsidiary of the Company) without Employee's consent and for a reason other than (x) Cause, (y) Employee becoming Disabled or (z) Employee's death, (any such termination, an "**Involuntary Termination**") and (with respect to subsections (ii) and (iii) below) Employee signs, delivers and does not revoke a separation agreement and release of claims in a form satisfactory to the Company (the "Release") within the time period required by the Release (but in no event later than two and one-half (2½) months following the end of the calendar year in which the Involuntary Termination occurs), then following such termination of employment, or, if later, the effective date of the Release, Employee will receive the following payments and other benefits from the Company:

- (i) <u>Accrued Compensation</u>. Employee will be entitled to receive all accrued vacation, expense reimbursements and any other benefits due to Employee through the date of termination of employment in accordance with the Company's then existing employee benefit plans, policies and arrangements.
- (ii) <u>Severance</u>. Subject to Section 9(a), Employee will be entitled to receive continued payments of Employee's base salary (as in effect immediately prior to such termination and excluding any sales commissions, incentive compensation or other bonus or nonrecurring compensation) for a period of six months, less applicable withholding payable in accordance with the Company's normal payroll policies.
- (iii) Options. With respect to all of Employee's options (the "Options") to purchase Company common stock outstanding on the date of such termination (whether granted on, before or after the date of this Agreement), Employee will have the period following such termination of employment to exercise such Options that is specified in the stock plans, if any, under which the Options were granted and in any applicable agreements between the Company and Employee; provided, however, to the extent that, pursuant to the provisions of such stock plans and applicable agreements, such Options continue to vest during the period, if any, that Employee provides consulting services to the Company pursuant to Section 3(a)(ii) or otherwise, then Employee will have the period following the termination of such consulting services to exercise such Options that is specified in such stock plans and applicable agreements. In all other respects, such Options will continue to be subject to the terms and conditions of the stock plans, if any, under which they were granted and any applicable agreements between the Company and Employee.
- (iv) <u>Payments or Benefits Required by Law.</u> Employee will receive such other compensation from the Company as may be required by law and will not be entitled to any other benefits from the Company except to the extent required by law (for example, "COBRA" coverage under Section 4980B of the Internal Revenue Code of 1986, as amended (the "Code")).
- (b) <u>Change of Control</u>. If the Involuntary Termination occurs (i) within two months before the first public announcement of a proposed Change of Control that is completed (whether or not in the same form as first announced) or (ii) within twelve (12) months following a Change of Control, then the benefits provided in subsection (ii) ("Severance") shall be for a period of six months after termination rather than any shorter period specified in such subsections.
- (c) Other Terminations. If Employee voluntarily terminates Employee's employment with the Company or any parent or subsidiary of the Company (other than for Good Reason within twelve (12) months of a Change of Control) or if the Company (or any parent or subsidiary of the Company employing Employee) terminates Employee employment with the Company (or any parent or subsidiary of the Company) for Cause, then Employee will (i) receive his or her earned but unpaid base salary through the date of termination of employment, (ii) receive all accrued vacation, expense reimbursements and any other benefits due to Employee through the date of termination of employment in accordance with established Company plans, policies and arrangements, and (iii) not be entitled to any other compensation or benefits (including, without limitation, accelerated vesting of Options or Restricted Stock) from the Company except to the extent provided under the applicable stock option agreement(s) or as may be required by law (for example, "COBRA" coverage under Section 4980B of the Code).
- (d) <u>Termination due to Death or Disability</u>. If Employee's employment with the Company (or any parent or subsidiary of the Company) is terminated due to Employee's death or Employee's becoming Disabled, then Employee or Employee's estate (as the case may be) will (i) receive the earned but unpaid base salary through the date of termination of employment, (ii) receive all accrued vacation, expense reimbursements and any other benefits due to Employee through the date of termination of employment in accordance with Company-provided or paid plans, policies and arrangements, and (iii) not be entitled to any other compensation or benefits from the Company except to the extent required by law (for example, "COBRA" coverage under Section 4980B of the Code).
- (e) <u>Exclusive Remedy.</u> In the event of a termination of Employee's employment with the Company (or any parent or subsidiary of the Company), the provisions of this Section 3 are intended to be and are exclusive and in lieu of any other rights or remedies to which Employee or the Company may otherwise be entitled (including any contrary provisions in the Employment Agreement), whether at law, tort or contract, in equity, or under this Agreement. Employee will be entitled to no benefits, compensation or other payments or rights upon termination of employment other than those benefits expressly set forth in this Section 3.

- 4. <u>Limitation on Payments</u>. In the event that the severance and other benefits provided for in this Agreement or otherwise payable to Employee (i) constitute "parachute payments" within the meaning of Section 280G of the Code and (ii) but for this Section 4, would be subject to the excise tax imposed by Section 4999 of the Code, then Employee's severance benefits under Section 4(a)(i) will be either:
 - (a) delivered in full, or
- (b) delivered as to such lesser extent which would result in no portion of such severance benefits being subject to excise tax under Section 4999 of the Code,

whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by Employee on an after-tax basis, of the greatest amount of severance benefits, notwithstanding that all or some portion of such severance benefits may be taxable under Section 4999 of the Code. Unless the Company and Employee otherwise agree in writing, any determination required under this Section 4 will be made in writing by Armanino LLP or by a national "Big Four" accounting firm (the "Accountants"), whose determination will be conclusive and binding upon Employee and the Company for all purposes. For purposes of making the calculations required by this Section 4, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and Employee will furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this Section. The Company will bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 4.

- 5. <u>Definition of Terms</u>. The following terms referred to in this Agreement will have the following meanings:
- (a) <u>Cause.</u> "Cause" means (i) a willful failure by Employee to substantially perform Employee's duties as an employee, other than a failure resulting from the Employee's complete or partial incapacity due to physical or mental illness or impairment, (ii) a willful act by Employee that constitutes gross misconduct and that is injurious to the Company, (iii) circumstances where Employee willfully imparts material confidential information relating to the Company or its business to competitors or to other third parties other than in the course of carrying out Employee's duties, (iv) a material and willful violation by Employee of a federal or state law or regulation applicable to the business of the Company that is injurious to the Company, or (v) Employee's conviction or plea of guilty or no contest to a felony, which the Company reasonably believes has or will negatively reflect on the Company's business or reputation. No act or failure to act by Employee will be considered "willful" unless committed without good faith and without a reasonable belief that the act or omission was in the Company's best interest.
 - (b) Change of Control. "Change of Control" means the occurrence of any of the following:
- (i) the sale, lease, conveyance or other disposition of all or substantially all of the Company's assets to any "person" (as such term is used in Section 13(d) of the Securities Exchange Act of 1934, as amended), entity or group of persons acting in concert;
- (ii) any person or group of persons becoming the "beneficial owner" (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding voting securities;
- (iii) a merger or consolidation of the Company with any other corporation, other than a merger or consolidation that would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its controlling entity) at least 50% of the total voting power represented by the voting securities of the Company or such surviving entity (or its controlling entity) outstanding immediately after such merger or consolidation; or

(iv) a contest for the election or removal of members of the Board that results in the removal from the Board of at least 50% of the incumbent members of the Board.

- (c) [Reserved].
- (d) <u>Disability</u>. "Disability" will mean that Employee has been unable to perform the principal functions of Employee's duties due to a physical or mental impairment, but only if such inability has lasted or is reasonably expected to last for at least six months. Whether Employee has a Disability will be determined by the Board based on evidence provided by one or more physicians selected by the Board.
- (e) <u>Good Reason</u>. "Good Reason" means the occurrence of any of the following without the Employee's consent: (i) a material diminution in Employee's Base Salary, except for reductions that are in proportion to any salary reduction program approved by the Board that affects a majority of the senior executives of the Company; (ii) a material diminution in Employee's authority, duties, or responsibilities; (iii) a material diminution in the authority, duties, or responsibilities of the supervisor to whom Employee is required to report; (iv) a material change in the geographic location at which Employee must perform his services of not less than fifty (50) miles from the Company's primary place of business immediately prior to such relocation; or (v) any other action or inaction that constitutes a material breach by the Company of this Agreement.
- (f) Section 409A Limit. "Section 409A Limit" means the lesser of two (2) times: (i) Employee's annualized compensation based upon the annual rate of pay paid to Employee during the Company's taxable year preceding the Company's taxable year of Employee's termination of employment as determined under Treasury Regulation 1.409A-1(b)(9)(iii)(A)(1) and any Internal Revenue Service guidance issued with respect thereto; or (ii) the maximum amount that may be taken into account under a qualified plan pursuant to Section 401(a)(17) of the Code for the year in which Employee's employment is terminated.
- 6. <u>Non-Solicitation; Confidential Information</u>. For a period beginning on the Effective Date and ending six (6) months after Employee ceases to be employed by the Company, Employee, directly or indirectly, whether as employee, owner, sole proprietor, partner, director, member, consultant, agent, founder, co-venturer or otherwise, will not: solicit, induce or influence any person to leave employment with the Company. At no time will Employee use proprietary Company information, including confidential information about any customers to directly or indirectly solicit business from any of the Company's customers and users on behalf of any business that competes with the principal business of the Company. The foregoing shall not preclude Employee from becoming employed by a business that competes with the Company so long as proprietary Company information, including confidential information about customers, is not disclosed to or used by the competing business or by Employee for the benefit of the competing business.

7. Successors.

- (a) The Company's Successors. Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets will assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Agreement, the term "Company" will include any successor to the Company's business and/or assets which executes and delivers the assumption agreement described in this Section 7(a) or which becomes bound by the terms of this Agreement by operation of law.
- (b) <u>The Employee's Successors.</u> The terms of this Agreement and all rights of Employee hereunder will inure to the benefit of, and be enforceable by, Employee's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

Notice.

- (a) General. Notices and all other communications contemplated by this Agreement will be in writing and will be deemed to have been duly given when personally delivered or when mailed by U.S. registered or certified mail, return receipt requested and postage prepaid. In the case of Employee, mailed notices will be addressed to him or her at the home address which he or she most recently communicated to the Company in writing. In the case of the Company, mailed notices will be addressed to its corporate headquarters, and all notices will be directed to the attention of its President.
- (b) Notice of Termination. Any termination by the Company for Cause or by Employee for Good Reason or as a result of a voluntary resignation will be communicated by a notice of termination to the other party hereto given in accordance with Section 8(a) of this Agreement. Such notice will indicate the specific termination provision in this Agreement relied upon, will set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination under the provision so indicated, and will specify the termination date (which will be not more than thirty (30) days after the giving of such notice). The failure by Employee to include in the notice any fact or circumstance which contributes to a showing of Good Reason will not waive any right of Employee hereunder or preclude Employee from asserting such fact or circumstance in enforcing his or her rights hereunder.

9. Miscellaneous Provisions.

- Section 409A. Notwithstanding anything to the contrary in this Agreement, if Employee is a "specified employee" within the meaning of Section 409A of the Code and any final regulations and guidance promulgated thereunder, as they each may be amended from time to time ("Section 409A") at the time of Employee's termination other than due to Employee's death (provided that such termination is a "separation from service" within the meaning of Section 409A, as determined by the Company), then only that portion of the cash severance and shares subject to accelerated RSUs payable to Employee pursuant to this Agreement, if any, and any other severance payments or separation benefits, in each case which may be considered deferred compensation under Section 409A (together, the "Deferred Compensation Separation Benefits"), which (when considered together) do not exceed the Section 409A Limit (as defined herein) may be made within the first six (6) months following Employee's termination of employment in accordance with the payment schedule applicable to each payment or benefit. Any portion of the Deferred Compensation Separation Benefits in excess of the Section 409A Limit otherwise due to Employee on or within the six (6) month period following Employee's termination will accrue during such six (6) month period and will become payable in a lump sum payment on the date six (6) months and one (1) day following the date of Employee's termination of employment. All subsequent Deferred Compensation Separation Benefits, if any, will be payable in accordance with the payment schedule applicable to each payment or benefit. Notwithstanding anything herein to the contrary, if Employee dies following his termination but prior to the six month anniversary of his date of termination, then any payments delayed in accordance with this paragraph will be payable in a lump sum as soon as administratively practicable after the date of Employee's death and all other Deferred Compensation Separation Benefits will be payable in accordance wit
- (b) No Duty to Mitigate. Employee will not be required to mitigate the amount of any payment contemplated by this Agreement, nor will any such payment be reduced by any earnings that Employee may receive from any other source.
- (c) <u>Waiver</u>. No provision of this Agreement will be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by Employee and by an authorized officer of the Company (other than Employee). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party will be considered a waiver of any other condition or provision or of the same condition or provision at another time.
 - (d) Headings. All captions and section headings used in this Agreement are for convenient reference only and do not form a part of this Agreement.
- (e) <u>Entire Agreement.</u> This Agreement constitutes the entire agreement of the parties hereto and supersedes in their entirety all prior representations, understandings, undertakings or agreements (whether oral or written and whether expressed or implied) of the parties with respect to the subject matter hereof, including (without limitation) the Employment Agreement). No future agreements between the Company and Employee may supersede this Agreement, unless they are in writing and specifically mention this Agreement. With respect to equity awards granted on or after the date hereof, the acceleration of vesting provided herein will apply to such awards except to the extent otherwise explicitly provided in the applicable equity award agreement, which provision must include a reference to this Agreement.

(f)	Choice of Law. The laws of the	e State of California	(without reference	to its choice of law	provisions) will go	vern the validity	, interpretation,
construction and perform	nance of this Agreement.						

- (g) <u>Severability</u>. The invalidity or unenforceability of any provision or provisions of this Agreement will not affect the validity or enforceability of any other provision hereof, which will remain in full force and effect.
 - (h) Withholding. All payments made pursuant to this Agreement will be subject to withholding of applicable income and employment taxes.
- (i) <u>Counterparts.</u> This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the caforth above.	se of the Company by its duly authorized officer, as of the day and year set
COMPANY	GIGA-TRONICS INCORPORATED
	Ву:
	Title:CEO
EMPLOYEE	
	Name: DANIEL KIRBY

Significant Subsidiaries

Name Microsource, Inc. <u>Jurisdiction of Incorporation</u> California

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements of Giga-tronics Incorporated on Form S-1 (File No. 333-233987, effective November 4, 2019; File No. 333-227874, effective October 19, 2018), Form S-8 (File No. 333-227872, effective October 17, 2018; File No. 333-135578, effective July 3, 2006; File No. 333-69688, effective September 24, 2001; File No. 333-45476, effective September 8, 2000; File No. 333-48889, effective March 30, 1998; File No. 333-39403, effective November 5, 1997; File No. 333-34719, effective August 29, 1997) and Form S-3 (File No. 333-210157, effective March 21, 2016; File No. 333-205051, effective August 20, 2015) of our report dated May 28, 2020, with respect to the consolidated balance sheets of Giga-tronics Incorporated and subsidiary as of March 28, 2020 and March 30, 2019, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the fiscal years in the two-year period ended March 28, 2020, which report appears in the March 28, 2020 annual report on Form 10-K of Giga-tronics Incorporated.

/s/ Armanino^{LLP} San Ramon, California

May 28, 2020

EXHIBIT 31.1

CERTIFICATIONS UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John R. Regazzi, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Giga-tronics, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: 05/28/2020

/s/ JOHN R. REGAZZI

John R. Regazzi

Chief Executive Officer

EXHIBIT 31.2

CERTIFICATIONS UNDER SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Lutz P. Henckels, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Giga-tronics, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: 05/ 28 /2020

/s/ LUTZ P. HENCKELS Lutz P. Henckels

Principal Financial Officer

EXHIBIT 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Giga-tronics Incorporated (the "Company") on Form 10-K for the period ending March 28, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John R. Regazzi, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: 05/28/2020

/s/ JOHN R. REGAZZI

John R. Regazzi Chief Executive Officer

EXHIBIT 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Giga-tronics Incorporated (the "Company") on Form 10-K for the period ending March 28, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Lutz P. Henckels, Principal Financial Officer, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: 05/28/2020

/s/ LUTZ P. HENCKELS

Lutz P. Henckels Principal Financial Officer