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

FORM 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended March 31, 2018

Or

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

Commission File No. 001-14605

GIGA-TRONICS INCORPORATED

(Exact name of registrant as specified in its charter)

California	94-2656341
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
5990 Gleason Drive, Dublin, CA	94568
(Address of principal executive offices)	(Zip Code)

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

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, No par value	OTCQB Market

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes [ ] No [X]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes [ ] No [X]

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

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

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

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

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

The aggregate market value of voting and non-voting common equity held by non-affiliates of the Registrant computed by reference to the price at which the common equity was sold or the average bid and asked prices as of September 30, 2017 was $6,885,959.

There were a total of 10,312,653 shares of the Registrant's Common Stock outstanding as of June 7, 2018.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the following documents have been incorporated by reference into the parts indicated:

PART OF FORM 10-K	DOCUMENT
PART III	Registrant's PROXY STATEMENT for its 2018 Annual Meeting of Shareholders to be filed no later than 120 days after the close of the fiscal year ended March 31, 2018.

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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 ("Giga-tronics", or the "Company") includes the operations of Microsource Inc. ("Microsource"), a wholly owned subsidiary, and the Giga-tronics Division.

Microsource primarily develops YIG (Yttrium, Iron, Garnet) tuned oscillators, filters, and microwave synthesizers for use in military defense applications. Microsource's two largest customers are prime contractors for which it develops and manufactures YIG RADAR filters used in fighter jet aircrafts. Revenues from Microsource comprised a majority of the Company's revenues for the fiscal years ended March 31, 2018 and March 25, 2017 (see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – Results of Operations).

The Giga-tronics Division designs, manufactures and markets a family of modular test products for use primarily in the electronic warfare (EW) segment of the defense electronics market. These modular test products represent critical building blocks in the construction of test and simulation systems used to validate the performance of RADAR & EW equipment. Giga-tronics Division customers include major prime defense contractors, the armed services (primarily in the U.S.) and research institutes. This product platform for RADAR & EW test & simulation applications (formerly referred to as "Hydra") has been the Company's principal new product development initiative since 2011 within the test & measurement equipment marketplace, replacing its broad product line of general purpose benchtop test & measurement products used for the design, production, repair and maintenance of products in the aerospace and telecommunications equipment marketplace. The substantial majority of these legacy product lines which the Company produced over the previous 35 years were sold by the Company between 2013 and 2016 because of lack of growth potential and poor gross margins. For example, we sold our SCPM product line to Teradyne in 2013; in December 2015, we sold our Power Meters and Amplifiers to Spanawave Corporation; and in June 2016, we sold our Switch product line to Astronics (see Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 10, Sale of Product Lines). The Company believes the EW test & simulation product market possesses greater long-term opportunities for revenue growth and improved gross margins compared to the general purpose test & measurement equipment marketplace.

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

The combined Company's principal executive offices are located at 5990 Gleason Drive, Dublin, California, and our telephone number at that location is (925) 328-4650.

Operating Segments

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

For more information regarding the Company's two reporting segments, see "Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 12, -Significant Customers and Industry Segment Information."

Products and Markets

Microsource

Microsource develops and manufactures a line of YIG tuned oscillators, filters, and microwave synthesizers. Microsource's two largest customers are prime contractors for which it develops and manufactures YIG RADAR filters used in prior generation fighter jets that receive upgraded RADAR systems as part of the U.S. government's RADAR Modernization Program (RMP). The upgrades are designed to extend the service life of these older aircraft. Microsource's RADAR filter solves an interference problem created when the jet's original RADAR system is replaced with newer technology while the jet's legacy onboard electronics remain untouched. Microsource supplies a uniquely designed filter for each aircraft type that receives a new RADAR and currently participates in the F/A-18E, F-15D and F-16 programs. Microsource is currently the sole source supplier to the prime contractors and has no competition for these products.

Giga-tronics Division

The Giga-tronics division designs, manufactures and markets a family of modular microwave test products aimed primarily for testing RADAR and Electronic Warfare ("EW") equipment. These modular products form a platform called the Advanced Signal Generation and Analysis ("ASGA") system and represents critical building blocks in the construction of test systems used to validate the performance of RADAR/EW equipment. The building blocks include individual calibrated transmit channels called the Advanced Signal Generator ("ASG") and individual calibrated receive channels called the Advanced Signal Analyzer ("ASA"). A System Reference Module (SRM100A) shared between the ASG and ASA modules completes the platform.

The platform's architecture uniquely addresses the new adaptive RADAR and EW test requirements with a closed loop solution. There are three key innovations in this platform which include: (1) replacing the synthesizer with a microwave up-converter, (2) separating the reference module, which is normally part of the synthesizer, into a separate building block, and (3) designing a mirrored down-converters that uses the same microwave components and layout as the up-converter. For example, by replacing the synthesizer with an up-converter and the I/Q modulation system with a digital front-end, the test system is architected similar to a RADAR system, allowing the user to think digitally at a low baseband frequency, greatly simplifying the programming of the test system. In addition, it facilitates building test systems with reduced size, weight and cost as compared with present synthesizer-based solutions, especially when the test system is required to have multiple transmitters and receivers to perform a validation test. As part of the development of our ASGA system solution, we relied on key technology developed by our Microsource subsidiary to design Microwave Integrated Circuits (MIC) which we customized for our ASGA system.

The end-user markets for these products are divided into three segments: RADAR, electronic countermeasures (ECM) and direction finding (DF). Performance validation of RADAR, ECM and DF systems all commonly require test systems with multiple transmit and receive channels, making the Giga-tronics Advanced Signal Generator and Analysis system an optimized component for these applications.

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 material 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.

Patents and Licenses

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

Our products are 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.

As of March 31, 2018, the Company maintains four non-provisional patents related to the Company's 2500B benchtop signal generator product line, which was not included in the legacy products sold to Spanawave (see Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 10, Sale of Product Lines). These patents describe advanced synthesis techniques and potentially can be extended for use with the Giga-tronics Advanced Signal Generation and Analysis system and to a number of Microsource synthesizer components. Additionally, the Company filed a provisional U.S. patent relating to the Advanced Signal Generation and Analysis system in June of 2016 and subsequently filed a non-provisional application in June of 2017. The patent application describes the unique internal design of the ASG and ASA along with the architecture of how all the components work together to facilitate building multi-channel test systems with reduced size, weight and cost as compared to present solutions. The application for the non-provisional patent is currently pending before the U.S. patent office.

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

In September 2015, we entered into a software development agreement with a major aerospace and defense company whereby the aerospace company would develop and license its simulation software to us. The simulation software (also called Open Loop Simulator or OLS technology) is currently the aerospace company's intellectual property. The OLS technology coordinates the behavior of the Company's ASGA system with various third-party hardware elements to generate the signals for validating ECM equipment. We license the OLS software as a bundled or integrated solution with our TEmS product.

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 aircraft and products for EW test and emulation 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 significant in fiscal 2019. U.S. and international defense-related agencies accounted for 93% of net sales in fiscal 2018 and 78% of net sales in fiscal 2017. Commercial business accounted for the remaining 7% of net sales in fiscal 2018 and 22% of net sales in fiscal 2017.

At the Giga-tronics Division, U.S. defense agencies and their prime contractors accounted for 76% and 24% of net sales in fiscal 2018 and 58% and 42% of net sales in fiscal 2017, respectively. Microsource reported 99% and 97% of net sales to prime contractors of U.S. defense agencies in fiscal 2018 and fiscal 2017, respectively.

During fiscal 2018, the Boeing Company accounted for 29% of our consolidated revenues and was included in the Microsource reporting segment. A second customer, CSRA LLC (CSRA acted as prime contractor for the United States Navy) accounted for 17% of our consolidated revenues during fiscal 2018 and was included in the Giga-tronics Division reporting segment.

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

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 Advanced Signal Generation and Analysis 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 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 31, 2018, our backlog of unfilled orders was approximately $11.2 million compared to approximately $11.4 million at March 25, 2017. As of March 31, 2018, there were approximately $3.8 million of orders scheduled for shipment beyond one year, compared to $5.7 million at March 25, 2017. 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.

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 serves two different markets.

Microsource is a sole source supplier serving the aftermarket for operational hardware associated with the US Government's RADAR Modernization Program (RMP) for prior generation fighter jet aircraft (i.e., the F/A-18E, F-15D and F-16 jets) to extend their useful lives. The Microsource business unit supplies YIG filters specifically designed for military aircraft to solve interference problems caused by newer, more powerful RADARs. The prime contractors responsible for integrating the new RADARs have over several years flight qualified our filters at considerable expense. Only a few other companies possess the technical know-how to design and manufacture filters of this nature, such as Teledyne and Micro-Lambda Wireless, but we believe the expense of requalifying a new component is prohibitive to the point where the prime contractor would only undertake such an effort if significant issues, such as significant technical deficiencies, were to arise. Microsource is the sole-source supplier of these filters and presently does not have any competition for this business. Microsource routinely maintains a "gold supplier" rating from its customers and received the Supplier of the Year award from one of the prime contractors in 2011. Microsource must maintain the Aerospace Industry's AS9100C certification for its Quality Management System which it currently maintains.

The Giga-tronics Division serves the electronic test equipment market with a microwave platform used in the evaluation of military RADAR and electronic warfare (EW) systems. These applications represent niche segments within the broader test equipment market. While the niche market segments of RADAR and 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, focused solutions.

Giga-tronics chose a unique architecture to address the new RADAR and EW test requirements that are adaptive/cognitive. To exercise these new RADARs and jamming (i.e. interference) signals necessitates a real time, closed loop, dynamic simulation system. We believe our microwave product presents a paradigm shift providing a closed loop test capability that is not available from any other competitor. To maintain our position against competitors that have greater resources in research, development and manufacturing with substantially broader product lines and channels, we (a) place strong emphasis on maintaining a high degree of technical competence as it relates to the development of new microwave products, (b) are highly selective in establishing technological objectives and (c) 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 much larger companies, Northrop Grumman/Amherst and Textron/AAI sell open loop equipment that competes with the Giga-tronics TEmS and Multi-Aircraft signal generator solutions, albeit at a much higher selling price. These test systems from Northrup Grumman and Textron have long delivery schedules, represent expensive capital investments to the customers that buy them and typically are shared among a large number of users generally limiting access to their testing capabilities. Giga-tronics can complement these larger test systems by uniquely addressing the new closed loop test requirements for the next generation RADAR/EW devices and by offering smaller, lower cost and more flexible testing solutions that can be delivered more quickly, which greatly increases a user's access to systems test capability and reduces the risk of program failure.

Sales and Marketing

Microsource and the Giga-tronics Division sell their products primarily direct to U.S. defense agencies and their prime defense contractors.

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 advancements in component technologies into our new products. In fiscal 2018 and fiscal 2017, product development expenses totaled approximately $1.8 million and $2.3 million, respectively.

The development of our Advanced Signal Generation and Analysis system product platform for EW test & emulation applications (formerly described as "Hydra") has been the Company's primary new product development initiative since 2011. Through March 31, 2018, the Company has spent over $13 million towards the development of the ASGA system product platform. The Company also anticipates increasing the product development efforts related to its Microsource business unit's RADAR filter technology in future periods. Our product development activities are funded internally, through product line sales, or through outside equity investment and debt financing. Product development activities are expensed as incurred, except software development costs associated with our Advanced Signal Generation and Analysis system, which were fully amortized as of March 31, 2018.

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 assembly and testing of Microsource and Giga-tronics Division products are done at our Dublin facility.

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 31, 2018, and March 25, 2017, we employed 43 and 57 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 2018	Fiscal 2017	Fiscal 2018	Fiscal 2017
Domestic	$ 9,058	$ 15,938	92%	98%
International	742	329	8%	2%
Total	$ 9,800	$ 16,267	100%	100%

See Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 12, Significant Customers and Industry Segment Information for further breakdown of international sales for the last two fiscal years.

ITEM 1A. RISK FACTORS

Our recent losses, limited liquidity and limited capital resources raise substantial doubt about our ability to continue as a going concern

We incurred net losses of $3.1 million in fiscal 2018, and $1.5 million in fiscal 2017. These losses have contributed to an accumulated deficit of $28.7 million as of March 31, 2018.

Beginning in fiscal 2012, we invested primarily in the development of our Advanced Signal Generation and Analysis system product platform for EW test & emulation applications (formerly referred to as “Hydra”) which the Company believes possesses greater long-term opportunities for revenue growth and improved gross margins compared to our previous general-purpose test & measurement product lines, the substantial majority of which have been sold as of March 31, 2018. Through March 31, 2018, the Company has spent over $13 million towards the development of the ASGA system product platform. Although we anticipate long-term revenue growth and improved gross margins from the new ASGA product platform, delays in completing it have also contributed to our losses. We have also experienced delays in the development of features, receipt of orders, and shipments for the new ASGA system products. These delays have significantly contributed to a decrease in working capital from $620,000 at March 25, 2017 to ($386,000) at March 31, 2018. Although ASGA system products have now shipped to several customers, potential delays in the refinement of further features, longer than anticipated sales cycles, or the ability to generate shipments in significant quantities, could significantly contribute to additional future losses.

These matters raise substantial doubt as to our ability to continue as a going concern.

To address these matters, our management has taken several actions to provide additional liquidity and reduce costs and expenses going forward. These actions are described in Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 2, Going Concern and Management’s Plan.

We face risks related to production delays, delays of customer orders and higher selling price of a new product platform

We invested heavily in the development of our new ASGA product platform, however, delays in completing its development, together with early design and manufacturing issues and longer than anticipated sales cycles have contributed to our losses and increased accumulated deficit as of March 31, 2018. Additionally, the average selling price of our new ASGA products is considerably higher that our prior general-purpose test & measurement products, which in turn, requires additional internal approvals on the part of the purchaser 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 significantly contribute to additional losses.

Trading of our common stock has moved from the NASDAQ Capital Market to the OTCQB Market

On May 4, 2017, we received a notification letter from The NASDAQ Stock Market ("NASDAQ") advising the Company that it has initiated proceedings to delist the Company from NASDAQ for the Company's failure to comply with NASDAQ's bid price rule. As previously reported on November 1, 2016, NASDAQ notified the Company that the bid price of its listed security had closed at less than $1 per share over the previous 30 consecutive business days, and, thus, did not comply with Listing Rule 5550(a)(2) (the "Rule").

On October 30, 2017, the Company's common stock began trading on the OTCQB Market. The Company's ticker symbol (GIGA) remained the same. As a result of this change, there may be reduced liquidity for our common stock and it could be more difficult for investors to purchase or sell shares of our common stock.

Giga-tronics Inc. remains a public company following the delisting and our shares will continues to trade publicly. We will continue to make SEC filings on Forms 10-K, 10-Q and 8-K, and we will remain subject to the SEC rules and regulations applicable to reporting companies under the Exchange Act. We will maintain an independent Board of Directors with an independent Audit Committee and provide annual financial statements audited by an independent auditor and unaudited interim financial reports reviewed by our independent auditors, prepared in accordance with U.S. generally accepted accounting principles.

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, actual shipments could be less than projected shipments with a resulting decline in sales. 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.

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 and commercialize our existing products, and in part, on our ability to develop, manufacture and successfully introduce new products and product lines with improved capabilities, and to continue to enhance existing products. There can be no assurance that we will successfully complete the development of current or future products, or that such products will achieve market acceptance. The inability to develop new products in a timely manner could have a material adverse impact on our operating performance and liquidity.

Our operating results may fluctuate from quarter to quarter, making it difficult to predict future performance

Our revenue, expenses and operating results have fluctuated, and may in the future continue to fluctuate significantly from quarter to quarter due to a number of factors. 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, our ability to timely develop and produce our products, as well as other factors described elsewhere in this Form 10-K.

Our common stock price is volatile

The market price of our common stock could be subject to significant fluctuations in response to variations in quarterly operating results, receipt or cancellation of significant orders, reduction in revenues or lower earnings or increased losses and reduced levels of liquidity when compared to previous quarterly periods, and other factors such as announcements of technological innovations or new products by us or by our competitors, government regulations or developments in patent or other proprietary rights. In addition, the OTCQB Market and other stock markets have experienced significant price fluctuations in recent years. Some of these fluctuations often have been unrelated to the reported operating performance of the specific companies whose stocks are traded. Broad market fluctuations, as well as general foreign and domestic economic conditions, may adversely affect the market price of our common stock.

Our stock at any time has historically traded on low volume on the NASDAQ Capital Market and OTCQB Market. Sales of a significant volume of stock could result in a decline of our share price.

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 a product 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. To date, performance problems in our products or in other products used together with our products have not had a material adverse effect on our business. However, management cannot be certain that a material adverse impact will not occur in the future.

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 the competitors will not gain greater market acceptance than any developed by us.

We may incur substantial costs enforcing our intellectual property rights or defending against third-party claims as a result of litigation or other proceedings

In connection with the potential enforcement of our own intellectual property rights or disputes related to the validity or alleged infringement of third-party intellectual property rights, including patent rights, we may in the future be subject to claims, negotiations or complex, protracted litigation. Intellectual property disputes and litigation may be costly and can be disruptive to our business operations by diverting attention and energies of management and key technical personnel, and by increasing our costs of doing business. Additionally, we may not prevail in any future litigation and disputes, which could adversely affect our results of operations and financial condition.

If we do not generate net cash flow from our operations and if we are unable to raise additional capital, our financial condition would be adversely affected and we may not to be able to execute our growth strategy and we could become insolvent

We cannot assure that we will generate cash from operations or other potential sources to fund our future working capital needs. The lack of additional working capital from any inability to generate cash flow from operations or to raise equity or debt financing could force us to discontinue or suspend unprofitable product lines, business segments or otherwise substantially curtail or cease operations and would, therefore, have an adverse effect on our business and financial condition. Furthermore, we cannot assure that any necessary funds, if available, would be available on attractive terms or that they would not have a significantly dilutive effect on our existing stockholders. 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 Advanced Signal Generation and Analysis system product platform is 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 new ASGA 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 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.

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 our 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 facility could require us to pay more to hire and retain key personnel, thereby increasing our costs.

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 facility 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 other natural disasters and other events that could disrupt our operations, such as cybersecurity breaches, 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.

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 previously occupied a 47,300 square foot facility in nearby San Ramon, California under a lease agreement which expired on April 30, 2017. We believe that our Dublin facility is adequate for our business activities.

ITEM 3. LEGAL PROCEEDINGS

As of March 31, 2018, the Company has no material pending legal proceedings. From time to time, the Company is involved in various disputes and litigation matters that arise in the ordinary course of business. On August 16, 2016, Spanawave filed a lawsuit against us in California Superior Court (Contra Costa County) relating to the sale of certain of our business lines in 2016. On August 25, 2016, Spanawave's affiliate, Liberty Test Equipment, commenced an arbitration proceeding alleging breach of a distribution agreement. On October 16, 2017, the Company reached a settlement agreement with Spanawave and Liberty Test whereby all parties exchanged mutual releases and agreed that phases one through five of the Asset Purchase Agreement dated December 15, 2015 were concluded and the sale of the remaining phase (Phase 6) to Spanawave (which was in dispute) was abandoned. The abandoned Phase 6 Legacy Signal Generators product line (and related inventory) remains an asset of the Company. As part of the settlement, the Company, Spanawave and Liberty Test agreed to dismiss and or withdraw all related complaints, cross-complaints and arbitration claims.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable

PART II

ITEM 5. MARKET FOR COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER REPURCHASES 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 31, 2018 was approximately 106. A significantly larger number of stockholders 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 Quarter			Fiscal Quarter		
	2018	**High**	**Low**	**2017**	**High**	**Low**
First Quarter	(3/26 - 6/24)	$ 0.90	$ 0.73	(3/27 - 6/25)	$ 1.47	$ 1.06
Second Quarter	(6/25 - 9/30)	0.89	0.58	(6/26 - 9/24)	1.15	0.93
Third Quarter	(10/01 - 12/30)	0.85	0.37	(9/25 - 12/24)	0.95	0.63
Fourth Quarter	(12/31 - 3/31)	0.42	0.26	(12/25 - 3/25)	1.07	0.65

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 31, 2018, the Company's assets were less than this sum by $5.1 million. Our shares of Series E preferred stock provide for semi-annual 6% cash dividends based on the original purchase price of $25.00 per share, however we expect that we will exercise our right to pay any such dividends in shares of our common stock instead of cash for the foreseeable future.

Penny Stock

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

Equity Compensation Plan Information

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

Equity Compensation Plan Information

Plan Category	No. of securities to be issued upon exercise of outstanding options (a)	Weighted average exercise price of outstanding options (b)	No. of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders (1)	1,478,700	$ 0.56	456,677
Equity compensation plans not approved by security holders (2)	400,000	0.33	—
Total	1,878,700	$ 0.51	456,677

(1) Excludes warrants issued to purchasers of units consisting of stock and warrants in private placements, to a placement agent for services in connection with a private placement and to lenders in connection with debt financing. Includes nonqualified options for 299,750 shares repriced from $1.64, $1.42 and $1.65 per share to $0.33 per share, the closing market price on the effective date.

(2) Relates to a special grant of nonqualified options for 400,000 shares of common stock in consideration of employment of an employee and officer. The exercise price is $0.33 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 fiscal year ended March 31, 2018.

Recent Sales of Unregistered Securities

On March 26, 2018, we sold 43,800 shares of a new series of preferred stock, in reliance on the exemption from registering provided by Section 4(2) of the Securities Act of 1933, as amended (the "Securities Act"), 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock, and entered into a related Investor Rights Agreement with the purchases. For description of the terms of the Series E Shares and of the Investor Rights Agreement, see Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 19, Preferred Stock and Warrants.

On March 26, 2018, we issued 150,000 shares of our common stock to Partners for Growth V, L.P. ("PFG") in exchange for PFG's agreement to eliminate the "put" feature of certain warrants that we had previously issued. We relied on the exemption afforded by Section 4(2) of the Securities Act for this issuance. For a description of this transaction, see Item 8, Financial Statements and Supplementary Date, Note 8, Term Loans, Revolving Loan and Warrants.

On March 20, 2018, in consideration of his agreement to join us an executive officer and employee, we granted Lutz P. Henckels, a director and our acting chief financial officer, an option to purchase 400,000 shares of common stock at the price of $0.33 per share based on reliance on the exemption afforded by Section 4(2) of the Securities Act. One fourth of the option vests on the first anniversary of the grant date and 1/48 of the option vests on each of the 36 months thereafter.

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 CONDITIONS AND RESULTS OF OPERATIONS

Overview and Refocusing of Giga-tronics

We produce YIG (Yttrium, Iron, Garnet) tuned oscillators, RADAR filters, and microwave synthesizers for use in military defense applications. We also produce sophisticated test and measurement equipment primarily used in electronic warfare test & emulation applications. We have two reporting segments: Microsource and the Giga-tronics Division.

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

- The Giga-tronics Division designs, manufactures and markets a family of modular test products for use primarily in the electronic warfare (EW) segment of the defense electronics market. These modular test products represent critical building blocks in the construction of test and simulation systems used to validate the performance of RADAR & EW equipment. Giga-tronics Division customers include major prime defense contractors, the armed services (primarily in the U.S) and research institutes. This product platform for RADAR & EW test & simulation applications (formerly referred to as "Hydra") has been the Company's principal new product development initiative since 2011 within the test & measurement equipment marketplace, replacing its broad product line of general purpose benchtop test & measurement products used for the design, production, repair and maintenance of products in the aerospace and telecommunications equipment marketplace. The substantial majority of these legacy product lines which the Company produced over the previous 35 years were sold by the Company between 2013 and 2016 because of lack of growth and poor growth margins. For example, we sold our SCPM product line to Teradyne in 2013; in December 2015, we sold our Power Meters and Amplifiers to Spanawave Corporation; and in June 2016, we sold our Switch product line to Astronics (see Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 10, Sale of Product Lines). The Company believes the EW test and simulation product market possesses greater long-term opportunities for revenue growth and improved gross margins compared to the general purpose test & measurement equipment marketplace.

- The recent sales of our legacy general-purpose test & measurement product lines and focus on our Microsource products and our EW test & emulation product platform has allowed us to significantly reduce our headcount and operating expenses during fiscal years 2018 and 2017. For example, our operating expenses for fiscal 2018 were 15% lower as compared to fiscal year 2017 and 30% lower as compared to fiscal year 2016.

The Company believes that customer spending for EW systems, including test and emulation, will grow in future years due to more complex RADAR signals and foreign investment in new technology which will require customers to have greater access to more sophisticated test and emulation equipment

Although the Company believes its RADAR & EW test products have the potential to significantly grow our sales, we have experienced significant delays in developing, manufacturing, and receiving orders for these products. These EW platform products are the most technically complex and advanced products Giga-tronics has developed and manufactured, and we have experienced delays in bringing the product to market and efficiently manufacturing it. It is also priced significantly higher than our previous general-purpose test & measurement products, and we have experienced longer than anticipated procurement cycles in the electronic warfare market it services. The delays in the development, refinement and manufacturing of the EW platform products, along with the longer than anticipated procurement cycles, have contributed to the significant operating losses in fiscal years 2018 and 2017. Through March 31, 2018, the Company has delivered its new Radar & EW test products to multiple customers resulting in approximately $10 million in cumulative revenue. Additionally, the Company has recently restructured and refocused its sales force towards selling complete test solutions to defense agencies and prime contractors as opposed to component selling. To bring the EW product platform to its full potential, Giga-tronics may be required to seek additional working capital; however, there are no assurances that such working capital will be available, or on terms acceptable to the Company. The Company may also be required to further reduce expenses if EW product platform sales goals are not achieved and thereby restructure its operations to rely solely on its more profitable Microsource MIC component business segment to generate profits and cash from operating activities. As part of such a restructuring, management believes the MIC components which the Company developed for the RADAR & EW test products could be a source of growth for the Microsource business segment.

The Company also anticipates growth in its Microsource RADAR filter business because of its strong order backlog as of March 31, 2018 and the potential for significant additional future orders for such products and related services.

Significant Orders

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

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 also finalized an associated multiyear $10.0 million YIG production order ("YIG Production Order"). The Company started shipping the YIG Production Order in the second quarter of fiscal 2017 and anticipates shipping the remainder through fiscal 2020.

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

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

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

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

Giga-tronics Division

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

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

Results of Operations

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

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

Total new orders received in fiscal 2018 were $9.6 million which was $5.5 million or 36% lower than the $15.1 million received in fiscal 2017. The decrease was primarily the result of lower Giga-tronics Division product orders ($5.5 million or 73%) due mainly to the Company's recent divestures of legacy test & measurement product lines (see Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 10, Sale of Product Lines) and a decrease in ASGA product orders of $3.0 million due to a longer than anticipated sales cycle.

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

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

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

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

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

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

Allocation of Net Sales				% change	
(Dollars in thousands)	**2018**	**2017**	**2016**	**2018 vs. 2017**	**2017 vs. 2016**
ASGA ("Hydra") Sales	$ 2,205	$ 5,286	**$** 1,783	(58)%	197%
Legacy Product Sale	532	2,735	6,896	(81)%	(60)%
Giga-tronics Division	$ 2,737	$ 8,021	$ 8,679	(66)%	(8)%
Microsource	7,063	8,246	5,917	(14)%	39%
Total	$ 9,800	$ 16,267	$ 14,596	(40)%	11%

Net sales for the fiscal year ended March 31, 2018 were $9.8 million, a decrease of 40%, compared to $16.3 million for the fiscal year ended March 26, 2017. The majority of the sales decrease in fiscal 2018 was attributable to the Giga-tronics Division which was lower by $5.3 million or 66% primarily due to a $3.1 million or 58% decrease in ASGA product sales due to longer than anticipated sales cycles and in part, by the Company's reduced focus on selling complete EW test solutions in fiscal 2018, and a $2.2 million or 81% decrease in legacy product sales due to the Company's recent legacy product line divestitures (see Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 10, Sale of Product Lines). Microsource sales decreased in fiscal 2018 by $1.2 million or 14% compared to fiscal 2017 due to lower scheduled YIG RADAR filter shipments in fiscal 2018 and the completion of certain related nonrecurring engineering (NRE) services in fiscal 2017.

Net sales for fiscal 2017 were $16.3 million, an increase of $1.7 million or 11% compared to $14.6 million in fiscal 2016. The majority of the sales increase in fiscal 2017 was attributable to Microsource due to an increase in scheduled YIG RADAR filter shipments in fiscal 2017 and the completion of certain related NRE services in fiscal 2017. Giga-tronics Division sales decreased $658,000 or 8% in fiscal 2017 compared to fiscal 2016 which was comprised of a $4.2 million or 60% decrease in legacy product sales due to recent product line divestitures (see Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 10, Sale of Product Lines) which was substantially offset by a $3.5 million increase in ASGA system shipments due mainly to the orders from the United States Navy in fiscal 2017.

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

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

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

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

Operating expenses were as follows for the fiscal years shown:

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

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

Operating expenses decreased 17%, or $1.4 million in fiscal 2017 compared to fiscal 2016. Engineering expenses decreased $552,000 primarily due to lower personnel related expenses as a result of the sale of the Switch and Legacy product lines as well as assigning certain engineers to a Microsource nonrecurring engineering project that is recorded as cost of sales. Selling, general and administrative expenses decreased $881,000 primarily due to a decrease associated with non-cash stock based compensation (primarily in connection with director compensation), a decrease in outside services related to management consulting, and a decrease in bonuses and commissions as a result of the sale of the legacy products to Astronics and Spanawave.

Derivative Liability

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

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

Gain on Sale of Product Lines

In October 2017, the Company recognized a gain of $324,000 net of $51,000 of associated expenses related to the sale of its legacy products to Spanawave. The Company received $375,000 from Spanawave during the first quarter of fiscal 2017 but could not recognize the gain on the sale of the legacy asset as a result of a dispute with Spanawave (see Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 10, Sale of Product Lines). On October 16, 2017, the Company reached a settlement agreement with Spanawave and the net gain from the asset sale is now included in the accompanying consolidated financial statements for 2018.

In fiscal 2017, the Company recognized a net gain of $802,000 associated with the sale of its Switch product line to Astronics (see Part II-Item 8. Financial Statements and Supplementary Data – Notes to Consolidated Financial Statements, Note 10, Sale of Product Lines).

Net Interest Expense

Net interest expense in fiscal 2018 was $461,000 an increase of $328,000 over fiscal 2017. The increased net interest expense in fiscal 2018 was primarily due to the additional interest as a result of non-compliance with certain covenants on the PFG loan (see Note 8, Term Loans, Revolving Line of Credit and Warrants) and higher loan balances in fiscal 2018.

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

Net Loss

Net loss was $3.1 million in fiscal 2018, compared to a net loss of $1.5 million in fiscal 2017. The higher net loss recorded in fiscal 2018 was primarily due to decreased revenues as well as increases in cost of sales due to the impact of the change in estimate related to capitalized software development costs and interest expense discussed above. Net loss was also higher due to an $802,000 gain associated with the sale of the Switch product line in the first quarter of fiscal 2017.

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

Net Inventories

Inventories consisted of the following:

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

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

Financial Condition and Liquidity

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

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

Cash Flows

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

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

Cash Flows from Operating Activities

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

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

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

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

Cash Flows from Investing Activities

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

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

Cash Flows from Financing Activities

Cash provided by financing activities for the fiscal year ended March 31, 2018 was $2.4 million, primarily due to net proceeds of $1.5 million from a new term loan with PFG and net proceeds of $1.0 million from the Company's issuance of Series E convertible preferred stock.

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

Liquidity and Capital Resources

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

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

To help fund operations, we rely on advances under the line of credit with Bridge Bank. The line of credit which expired on May 7, 2017, was renewed through May 6, 2019 (see Item 8. Financial Statements and Supplementary Data, – Notes to Consolidated Financial Statements, Note 7, Accounts Receivable Credit Line). The agreement includes a subjective acceleration clause, which allows for amounts due under the facility to become immediately due in the event of a material adverse change in our business condition (financial or otherwise), operations, properties or prospects, or ability to repay the credit based on the lender's judgement. As of March 31, 2018, outstanding borrowings and available borrowing capacity under the line of credit were $552,000 and $77,000, respectively.

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

In order to raise additional working capital and to restructure the PFG loan, on March 26, 2018, the Company entered into a Securities Purchase Agreement for the sale of 43,800 shares of a newly designated series of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock ("Series E Shares") to approximately 15 private investors. The purchase price for each Series E Share was $25.00. Gross proceeds received by the Company were approximately $1.095 million (the "Placement"). Net proceeds to the Company after fees and expenses of the Placement was approximately $1.0 million. Each Series E Share is initially convertible at the option of the holder at the purchase price of $0.25 per share of common stock, which is 100 shares of the Company's common stock per each Series E Share (see Item 8. Financial Statements and Supplementary Data, Note 19, Preferred Stock – Series E Senior Convertible Voting Preferred Stock).

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

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

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

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

Contractual Obligations

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

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

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

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

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

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

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

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

Product Warranties

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

Accounts Receivable and Allowance for Doubtful Accounts

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

Inventory

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

Income Taxes

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

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

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

Going Concern

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

Software Development Costs

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

Discontinued Operations

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

Off-Balance-Sheet Arrangements

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

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

GIGA-TRONICS INCORPORATED
CONSOLIDATED BALANCE SHEETS
(In thousands except share data)

	March 31, 2018	March 25, 2017
Assets		
Current assets:		
Cash and cash-equivalents	$ 1,485	$ 1,421
Trade accounts receivable, net of allowance of $8 and $45, respectively	364	954
Inventories, net	5,487	4,811
Prepaid expenses and other current assets	87	452
Total current assets	7,423	7,638
Property and equipment, net	833	528
Other long term assets	175	175
Capitalized software development costs, net	—	733
Total assets	$ 8,431	$ 9,074
Liabilities and shareholders' equity		
Current liabilities:		
Line of credit	$ 552	$ 582
Loan payable, net of discounts and issuance costs	1,447	—
Accounts payable	996	1,107
Accrued payroll and benefits	343	583
Deferred revenue	3,374	3,614
Deferred rent	58	—
Capital lease obligations	52	50
Deferred liability related to asset sale	40	375
Other current liabilities	947	707
Total current liabilities	7,809	7,018
Warrant liability, at estimated fair value	—	222
Long term deferred rent	429	—
Long term obligations - capital lease	62	114
Total liabilities	8,300	7,354
Commitments and contingencies		
Shareholders' equity:		
Convertible preferred stock of no par value; Authorized - 1,000,000 shares		
Series A - designated 250,000 shares; no shares at March 31, 2018 and March 25, 2017 issued and outstanding	—	—
Series B, C, D- designated 19,500 shares; 18,533.51 shares at March 31, 2018 and March 25, 2017 issued and outstanding; (liquidation preference of $3,540 at March 31, 2018 and March 25, 2017)	2,911	2,911
Series E- designated 60,000 shares; 43,800 shares at March 31, 2018 issued and outstanding; (liquidation preference of $1,643 at March 31, 2018)	702	—
Common stock of no par value; Authorized - 40,000,000 shares; 10,312,653 shares at March 31, 2018 and 9,594,203 at March 25, 2017 issued and outstanding	25,200	24,390
Accumulated deficit	(28,682)	(25,581)
Total shareholders' equity	131	1,720
Total liabilities and shareholders' equity	$ 8,431	$ 9,074

See Accompanying Notes to Consolidated Financial Statements

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

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

See Accompanying Notes to Consolidated Financial Statements

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

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

See Accompanying Notes to Consolidated Financial Statements

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

	March 31, 2018	March 25, 2017
Cash flows from operating activities:		
Net loss	$ (3,101)	$ (1,546)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,116	827
Share based compensation	251	286
Accretion of discounts and issuance costs on debt	127	30
Adjustment of warrant liability to fair value	(172)	(131)
Change in fair value of equity forward	(16)	—
Capitalized software development costs	—	(334)
Change in other long term assets	—	(167)
Gain on sale of product line	(324)	(802)
Accrued interest and fees on loan payable	98	—
Change in deferred rent	487	(110)
Changes in operating assets and liabilities:		
Trade accounts receivable	590	1,175
Inventories	(676)	883
Prepaid expenses and other current assets	365	(134)
Accounts payable	(111)	(817)
Accrued payroll and benefits	(240)	(64)
Deferred revenue	(240)	810
Other current liabilities	229	38
Net cash used in operating activities	(1,617)	(56)
Cash flows from investing activities:		
Purchases of property and equipment	(688)	(41)
Cash received from sale of product line	—	1,225
Cash returned related to sale of product line	—	(375)
Net cash (used in) provided by investing activities	(688)	809
Cash flows from financing activities:		
Payments on capital leases	(50)	(45)
Repayments of line of credit	(30)	(218)
Proceeds from loan payable, net of issuance costs	1,456	—
Repayments of loan payable	—	(400)
Proceeds from issuance of Series E preferred stock, net of issuance costs of $102	993	—
Net cash (used in) provided by financing activities	2,369	(663)
Increase in cash and cash-equivalents	64	90
Beginning cash and cash-equivalents	1,421	1,331
Ending cash and cash-equivalents	$ 1,485	$ 1,421
Supplementary disclosure of cash flow information:		
Cash paid for income taxes	$ 2	$ 2
Cash paid for interest	$ 282	$ 77
Supplementary disclosure of noncash investing and financing activities:		
Fair value of warrants issued to EGE as issuance costs for Series E	$ 54	$ —
Fair value of modified warrants	$ 281	$ —
Common stock issued in connection with debt issuance	$ 224	$ —
Fully depreciated equipment disposal	$ 380	$ 174

See Accompanying Notes to Consolidated Financial Statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1 Summary of Significant Accounting Policies

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Recently Issued Accounting Standards

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

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

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

In May 2014, the FASB issued ASU 2014-09 ("ASU 2014-09"), Revenue from Contracts with Customers. ASU 2014-09 establishes a broad principle that would require an entity to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve this principle, an entity identifies the contract with a customer, identifies the separate performance obligations in the contract, determines the transaction price, allocates the transaction price to the separate performance obligations and recognizes revenue when each separate performance obligation is satisfied. ASU 2014-09 was further updated to provide clarification on a number of specific issues as well as requiring additional disclosures. ASU 2014-09 may be applied either retrospectively or through the use of a modified-retrospective method. The full retrospective method requires companies to recast each prior reporting period presented as if the new guidance had always existed. Under the modified retrospective method, companies would recognize the cumulative effect of initially applying the standard as an adjustment to opening retained earnings at the date of initial application. ASU 2014-09 is effective for annual reporting periods beginning after December 15, 2017, and early adoption is permitted beginning in the first quarter of 2017.

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

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

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

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

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

2 Going Concern and Management's Plan

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

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

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

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

In order to raise additional working capital and to restructure the PFG loan, on March 26, 2018, the Company entered into a Securities Purchase Agreement for the sale of 43,800 shares of a newly designated series of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock ("Series E Shares") to approximately 15 private investors. The purchase price for each Series E Share was $25.00. Gross proceeds received by the Company were approximately $1.095 million (the "Placement"). Net proceeds to the Company after fees and expenses of the Placement was approximately $1.0 million. Each Series E Share is initially convertible at the option of the holder at the purchase price of $0.25 per share of common stock, which is 100 shares of the Company's common stock per each Series E Share (see Note 19, Private Preferred Stock and Warrants – Series E Senior Convertible Voting Perpetual Preferred Stock).

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

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

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

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

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

3 Cash and Cash-Equivalents

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

4 Inventories

Inventories consisted of the following:

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

5 Property, Plant and Equipment, net

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

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

6 Software Development Costs

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

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

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

7 Accounts Receivable Line of Credit

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

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

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

8 Term Loans, Revolving Line of Credit and Warrants

2017 Loan Agreement

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

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

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

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

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

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

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

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

On March 26, 2018, concurrent with the execution of the Securities Purchase Agreement for the Series E Shares (see Note 19 – Preferred Stock and Warrants - Series E Senior Convertible Voting Perpetual Preferred Stock), the Company and PFG entered into a modification agreement providing for the restructuring of certain terms associated with approximately $1.7 million in indebtedness under the 2017 Loan. Subject to the sale of at least $1.0 million in Series E Shares, PFG agreed to waive all current defaults and cease applying the applicable default interest rate, returning to the stated non-default rate of 16%, and to lower the revenue and tangible net worth covenants for the remaining term of the loan. As consideration for the modifications, the Company reduced the exercise price of outstanding warrants previously granted to PFG pursuant to the 2014 Loan Agreement and Credit Line to purchase 260,000 shares of the Company's common stock (see 2014 Loan Agreement, Line Credit and Warrants below) from $1.42 to $0.25 per share and extended the exercisability of the warrants by one year to March 13, 2020.

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

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

2014 Loan Agreement, Line of Credit and Warrants

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

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

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

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

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

As of March 25, 2017, the estimated fair values of the derivative liabilities associated with the warrants issued in connection with the First Draw and Amendment were $133,000 and $89,000, respectively, for a combined value of $222,000. On March 26, 2018, the Company and PFG agreed to eliminate the cash put provision contained in warrants in exchange for the Company issuing 150,000 shares of the Company's common stock. Upon removal of the put, the warrants were re-valued using the Black-Scholes option-pricing model prior to being reclassified to equity. The resulting change in fair value of the warrants, along with the fair value of the common stock approximately $50,000 issued to PFG, was recognized as gain on adjustment of warrant liability in the consolidated statements of operations.

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

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

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

9 Fair Value

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

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

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

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

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

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

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

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

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

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

	Level 1	Level 2	Level 3
Warrant Liability	$ —	—	$ —
Total	$ —	—	$ —

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

	Level 1	Level 2	Level 3
Warrant Liability	$ —	—	$ 222
Total	$ —	$ —	$ 222

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

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

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

10 Sale of Product Lines

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

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

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

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

On December 15, 2015, the Company entered into an Asset Purchase Agreement with Spanawave Corporation, whereby Spanawave agreed to purchase the Giga-tronics Division product lines for its Power Meters, Amplifiers, and Legacy Signal Generators for $1.5 million. Although the asset purchase agreement was for $1.5 million, the Company never realized this amount as a result of the dispute with Spanawave as discussed below. The agreement provided for the transfer of these product lines to Spanawave sequentially in six phases beginning with certain sensor and amplifier products. The Company had transferred the Power Meters and Amplifiers in phases one through five, but still holds the rights to phase 6 (Legacy Signal Generators). During the second quarter ended September 24, 2016, the Company and Spanawave became engaged in a dispute, including litigation initiated by Spanawave and an arbitration proceeding initiated by Spanawave's affiliate Liberty Test Equipment, Inc. ("Liberty Test"), as to whether the Company had fulfilled all the requirements to close phases one through five and become entitled to the $375,000 received by the Company during the first quarter of fiscal 2017 (see below).

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

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

11 Selling and Advertising Expenses

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

12 Significant Customers and Industry Segment Information

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

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

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

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

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

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

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

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

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

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

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

13 Loss per Common Share

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

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

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

14 Income Taxes

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

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

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

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

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

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

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

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

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

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

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

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

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

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

	Fiscal Years	
(In thousands)	**2018**	**2017**
Balance as of beginning of year	$ 120	$ 106
Additions based on current year tax positions	2	14
(Reductions) additions for prior year tax positions	—	—
Balance as of end of year	$ 122	$ 120

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

15 Share-based Compensation and Employee Benefit Plans

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

Stock Options

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

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

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

(Dollars in thousands except share prices)	Shares	Weighted Average Exercise Price per share	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding at March 26, 2016	1,592,200	$ 1.52	6.8	$ 69
Granted	148,000	0.97		
Exercised	—	—		
Forfeited / Expired	(635,700)	1.57		
Outstanding at March 25, 2017	1,104,500	$ 1.41	6.1	$ 3
Granted	856,000	0.34	10.0	
Exercised	—	—		
Forfeited / Expired	(481,800)	1.34		
Outstanding at March 31, 2018	1,478,700	$ 0.56	8.0	$ —
Exercisable at March 31, 2018	524,450	$ 0.81	4.8	$ —
At March 31, 2018, expected to vest in the future	671,805	$ 0.42	9.8	$ —

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

Restricted Stock

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

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

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

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

16 Commitments and Contingencies

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

The Company also leases certain other equipment under operating leases.

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

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

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

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

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

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

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

17 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.

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

18 Private Placement Offering

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

19 Preferred Stock and Warrants

Series E Senior Convertible Voting Perpetual Preferred Stock

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Preferred Stock

As of March 31, 2018 and March 25, 2017

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

20 Subsequent Events

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

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

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders of
Giga-tronics Incorporated
Dublin, California

Opinion on the Financial Statements

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

The Company's Ability to Continue as a Going Concern

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

Basis for Opinion

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

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

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

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

/s/ Armanino LLP
San Ramon, California

June 19, 2018

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

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

Basis for Opinion

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

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

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

/s/ Crowe Horwath LLP

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

San Francisco, California
June 20, 2017

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 31, 2018.

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 31, 2018. 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 31, 2018, 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 31, 2018, 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 31, 2018, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

The Company is not aware of any information required to be reported on Form 8-K that has not been previously reported.

PART III

ITEM 10. DIRECTOR, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding Directors of the Company is set forth under the heading "Election of Directors" of the Company's Proxy Statement for its 2018 Annual Meeting of Shareholders, incorporated herein by reference. This Proxy Statement is to be filed no later than 120 days after the close of the fiscal year ended March 31, 2018.

ITEM 11. EXECUTIVE COMPENSATION

Information regarding the Company's compensation of its executive officers is set forth under the heading "Executive Compensation" of the Company's Proxy Statement for its 2018 Annual Meeting of Shareholders, incorporated herein by reference. This Proxy Statement is to be filed no later than 120 days after the close of the fiscal year ended March 31, 2018.

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

Information regarding security ownership of certain beneficial owners and management is set forth under the heading "Stock Ownership of Certain Beneficial Owners and Management" of the Company's Proxy Statement for its 2018 Annual Meeting of Shareholders, incorporated herein by reference. Information about securities authorized for issuance under equity compensation plans is set forth under the heading "Equity Compensation Plan Information" of its Proxy Statement for the 2018 Annual Meeting of Shareholders, incorporated herein by reference. This Proxy Statement is to be filed no later than 120 days after the close of the fiscal year ended March 31, 2018.

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

Information set forth in the Proxy Statement under the section captioned "Transactions with Management and Others" is incorporated herein by reference. This Proxy Statement is to be filed no later than 120 days after the close of the fiscal year ended March 31, 2018.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information set forth in the Proxy Statement under the section captioned "Appointment of Independent Registered Accounting Firm" is incorporated herein by reference. This Proxy Statement is to be filed no later than 120 days after the close of the fiscal year ended March 31, 2018.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENTS SCHEDULES

(a) The following consolidated financial statements of Giga-tronics Incorporated and the related independent registered public accounting firm are filed herewith:

1. Financial Statements. See Index to Financial Statements on page 29. The financial statements and Report of Independent Registered Public Accounting Firm are included in Item 8 are filed as part of this report.

2. Exhibits. The exhibit list required by this item is incorporated by reference to the Exhibit Index filed with this report.

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	June 19, 2018
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	Chairman of the Board of Directors	June 19, 2018
William J. Thompson		Date
/s/ LUTZ P. HENCKELS	Interim Chief Financial Officer and Director	June 19, 2018
Lutz P. Henckels	(Principal Financial & Accounting Officer)	Date
/s/ GORDON L. ALMQUIST	Director	June 19, 2018
Gordon L. Almquist		Date
/s/ JAMIE WESTON	Director	June 19, 2018
Jamie Weston		Date

The following exhibits are filed by reference or herewith as a part of this report:

INDEX TO EXHIBITS

3.1	Articles of Incorporation of the Company, as amended, incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K for the fiscal year ended March 27, 1999.
3.2	Certificate of Determination of Preferences of Preferred Stock Series A of the Company, incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K for the fiscal year ended March 27, 1999.
3.3	Certificate of Determination of Series B Convertible Voting Perpetual Preferred Stock of the Company, incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on November 14, 2011.
3.4	Certificate of Determination of Series C Convertible Voting Perpetual Preferred Stock of the Company, incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on February 25, 2013.
3.5	Certificate of Determination of Series D Convertible Voting Perpetual Preferred Stock of the Company, incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on July 3, 2013.
3.6	Amended and Restated Bylaws of the Company, incorporated by reference to Exhibit 3.2 to the Company's Annual Report on Form 10-K for the fiscal year ended March 29, 2008.
3.7	Certificate of Determination of 6.0% Series E Senior Convertible Voting Perpetual Preferred Stock of the Company, incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K field on March 30, 2018.
4.1	Rights Agreement between the Company and American Stock Transfer & Trust Company, LLC dated January 23, 2013, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on January 25, 2013.
4.2	Amendment No. 1 to Rights Agreement between the Company and American Stock Transfer & Trust Company, LLC dated June 27, 2013, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8- K filed on July 3, 2013.
4.3	Amendment No. 2 to Rights Agreement between the Company and American Stock Transfer & Trust Company, LLC dated February 16, 2015, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on February 20, 2015.
10.1	Form of Indemnification Agreement between the Company and each of its directors and officers, incorporated by reference to Exhibit 10.1 to the Company's Annual Report on Form 10-K for the fiscal year ended March 27, 2010.

10.2 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 Amended and Restated Warrant between the Company and Partners for Growth IV, L.P. dated June 16, 2014, incorporated by reference to Exhibit 10.6 to the Company's Annual Report on Form 10-K for the fiscal year ended March 29, 2014.

10.4 Amended and Restated Warrant between the Company and SVB Financial Group dated June 16, 2014, incorporated by reference to Exhibit 10.6 to the Company's Annual Report on Form 10-K for the fiscal year ended March 29, 2014.

10.5 Amended and Restated Warrant between the Company and PFG Equity Investors, LLC dated June 16, 2014, incorporated by reference to Exhibit 10.6 to the Company's Annual Report on Form 10-K for the fiscal year ended March 29, 2014.

10.6 Securities Purchase Agreement between the Company and Alara Capital AVI II, LLC dated June 27, 2013, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 3, 2013.

10.7 Securities Purchase Agreement between the Company and Alara Capital AVI II, LLC dated February 16, 2015, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 20, 2015.

10.8 Warrant to Purchase 898,634 Shares of Common Stock between the Company and Alara Capital AVI II, LLC dated February 16, 2015, incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8- K filed on February 20, 2015.

10.9 Warrant to Purchase 194,437 Shares of Common Stock between the Company and Alara Capital AVI II, LLC dated February 23, 2015, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8- K filed on February 27, 2015.

10.10 Investor Rights Agreement between the Company and Alara Capital AVI II, LLC dated November 10, 2011, incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on November 14, 2011.

10.11 Investor Rights Agreement between the Company and Alara Capital AVI II, LLC dated July 8, 2013, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on July 12, 2013.

10.12 Investor Rights Agreement between the Company and Alara Capital AVI II, LLC dated February 16, 2015, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on February 20, 2015.

10.13 Amendment No. 1 to Securities Purchase Agreement and Investor Rights Agreement between the Company and Alara Capital AVI II, LLC dated February 23, 2015, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 27, 2015.

10.14 Severance Agreement between the Company and John R. Regazzi dated June 3, 2010, incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on August 9, 2010. *

10.15 Severance Agreement between the Company and Michael R. Penta dated July 16, 2012, incorporated by reference to Exhibit 10.21 to the Company's Annual Report on Form 10-K filed on June 9, 2015. *

10.16 Severance Agreement between the Company and Temi C. Oduozor dated August 27, 2016. *

10.17 Lease Agreement between the Company and SF II Creekside LLC dated January 5, 2017.

10.18 Loan and Security Agreement between the Company and Partners for Growth V, L.P. dated April 27, 2017.

10.19 Asset Purchase Agreement between the Company and Spanawave Corporation, incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on February 8, 2016.

10.20 Form of Securities Purchase Agreement dated January 19, 2016, between the Company and individual investors, incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-3 (File No. 333- 210157) filed on March 14, 2016.

10.21 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.

10.22 Form of Rights Agreement dated January 29, 2016, between the Company and individual investors

10.23 Investor Rights Agreement dated March 26, 2018 between the Company and the investor parties thereto, incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed on March 30, 2018.

10.24 Conditional Waiver and Modification to Loan and Security Agreement dated March 26, 2018 between the Company and Partners For Growth.

10.25 Stock Option Award Agreement between the Company and Lutz Henckel dated June 6, 2018.*

20 Significant Subsidiaries.

23 Consent of Independent Registered Public Accounting Firm, Crowe Horwath LLP.

24 Consent of Independent Registered Public Accounting Firm, Armanino LLP.

31.1 Certification of Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002.

31.2 Certification of Principal Accounting & 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 Accounting & Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

101.1 The following materials from the Company's Annual Report on Form 10K for the year ended March 31, 2018, formatted in XBRL ("eXtensible Business Reporting Language"): (i) the Consolidated Balances Sheets, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Cash Flows, and (iv) the Notes to the Consolidated Financial Statements, tagged as blocks of text (furnished but not filed).

* Management contract or compensatory plan or arrangement.

Exhibit 10.16

GIGA-TRONICS INCORPORATED

SEVERANCE AGREEMENT

This Severance Agreement (the "**Agreement**") is made and entered into by and between TEMI ODUOZOR ("**Employee**") and Giga-tronics Incorporated, a California Corporation (the "**Company**"), effective as of August 27, 2016 (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. Term of Agreement. 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) Involuntary Termination other than for Cause, Death or Disability. 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) Accrued Compensation. 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.

(i i) Severance. Subject to Section 9(a), Employee will be entitled to receive continued payments of Employee's trailing 12 month salary (as in effect immediately prior to such termination) for a period of six months, less applicable withholding payable in accordance with the Company's normal payroll policies..

(iii) Continued Employee Benefits. The Company will reimburse Employee for premiums paid for the continuation of benefits Employee timely elects pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("**COBRA**") for Employee and Employee's eligible dependents under the Company's Benefit Plans for a period of six months following Employee's termination of employment; provided, however, that if during such period Employee becomes eligible for health coverage with another employer, all Company-reimbursements pursuant to this subsection will immediately cease. Employee will be solely responsible for electing such continuation coverage for Employee and Employee's eligible dependents.

(iv) 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.

(v) Payments or Benefits Required by Law. Employee will receive such other compensation or benefits from the Company as may be required by law (for example, "COBRA" coverage under Section 4980B of the Internal Revenue Code of 1986, as amended (the "**Code**")).

(b) Change of Control. 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 provide in subsection (ii) ("Severance") and (iii) ("Continued Employee Benefits") 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) Termination due to Death or Disability. 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) Exclusive Remedy. 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. Limitation on Payments. 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 BDO Seidman 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. Definition of Terms. The following terms referred to in this Agreement will have the following meanings:

(a) Benefit Plans. "**Benefit Plans**" means plans, policies or arrangements that the Company sponsors (or participates in) and that immediately prior to Employee's termination of employment provide Employee and/or Employee's eligible dependents with medical, dental, and/or vision benefits. Benefit Plans do not include any other type of benefit (including, but not by way of limitation, disability, life insurance or retirement benefits). A requirement that the Company provide Employee and Employee's eligible dependents with coverage under the Benefit Plans will not be satisfied unless the coverage is no less favorable than that provided to Employee and Employee's eligible dependents immediately prior to Employee's termination of employment.

(b) Cause. "**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.

(c) 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.

(d) [Reserved].

(e) Disability. "**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.

(f) Good Reason. "**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, including a requirements that Employee report to a corporate officer or employee instead of reporting directly to the Board; (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.

(g) 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. Non-Solicitation; Confidential Information. 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) The Employee's Successors. 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.

8. 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.

(a) Code 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 with the payment schedule applicable to each payment or benefit. It is the intent of this Agreement to comply with the requirements of Section 409A so that none of the severance payments and benefits to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply.

(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) Waiver. 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) Entire Agreement. 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 State of California (without reference to its choice of law provisions) will govern the validity, interpretation, construction and performance of this Agreement.

(g) Severability. 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) Counterparts. 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 case of the Company by its duly authorized officer, as of the day and year set forth above.

COMPANY

GIGA-TRONICS INCORPORTED

By: /s/ William J Thompson

Title: Acting CEO

EMPLOYEE

/s/ TEMI ODUOZOR

Name: Temi Oduozor

Exhibit 10.17

CREEKSIDE BUSINESS PARK

OFFICE LEASE

This Office Lease (the "**Lease**"), dated as of the date set forth in Section 1 of the Summary of Basic Lease Information (the "**Summary**"), below, is made by and between SFII CREEKSIDE, LLC, a Delaware limited liability company ("**Landlord**"), and GIGA-TRONICS INCORPORATED, a California corporation ("**Tenant**").

SUMMARY OF BASIC LEASE INFORMATION

TERMS OF LEASE		DESCRIPTION
1.	Date:	January 4, 2017
2.	Premises (Article 1):	
	2.1 Building:	The building located at 5990 - 5996 Gleason Drive Dublin, California 94568 containing approximately 85,441 rentable square feet of space ("**RSF**")
	2.2 Premises:	Approximately 23,873 rentable square feet of space located in the Building with a street address of 5990 Gleason Drive, as further set forth in **Exhibit A** to the Office Lease.
3.	Lease Term (Article 2):	
	3.1 Length of Term:	Approximately six (6) years and five (5) months.
	3.2 Lease Commencement Date:	The earlier to occur of (i) April 1, 2017 and (ii) the date upon which the Premises are Ready for Occupancy, which is anticipated to be April 1, 2017. Subject to the terms of Section 6.1 of the Tenant Work Letter attached to this Lease as **Exhibit B** (the "**Tenant Work Letter**"), Landlord shall allow Tenant approximately four (4) weeks prior access to the Premises prior to the "Substantial Completion" (as that term is defined in Section 5.1 of the Tenant Work Letter) of the Premises for the purpose of Tenant installing overstandard equipment or fixtures (including Tenant's data and telephone equipment) in the Premises.
	3.3 Lease Expiration Date:	If the Lease Commencement Date shall be the first day of a calendar month, then the day immediately preceding the seventy-seventh (77^{th}) "monthly" anniversary of the Lease Commencement Date; or, if the Lease Commencement Date shall be other than the first day of a calendar month, then the last day of the month in which the seventy-seventh (77^{th}) "monthly" anniversary of the Lease Commencement Date occurs.

4. Base Rent (Article 3):

Lease Year	Annualized Base Rent	Monthly Installment of Base Rent	Monthly Base Rent per Rentable Square Foot
1	$415,390.20	$34,615.85	$1.45
2	$429,714.00	$35,809.50	$1.50
3	$444,037.80	$37,003.15	$1.55
4	$458,361.60	$38,196.80	$1.60
5	$472,685.40	$39,390.45	$1.65
6	$487,009.20	$40,584.10	$1.70
7 (through Lease Expiration Date)	$501,333.00	$41,777.75	$1.75

***Note**: The Base Rent payable for the first five (5) months of the Lease Term is subject to abatement as provided in Section 3.2 of the Office Lease.

5. Tenant Improvement Allowance (**Exhibit B**): $358,095.00 (i.e., $15.00 per rentable square foot of the Premises)

6. Tenant's Share (Article 4): Approximately 27.94%; provided, however, (i) utilities are separately metered and directly paid by Tenant to the applicable utility provider, and (ii) janitorial service shall be paid by Tenant directly to the applicable janitorial provider.

7. Permitted Use (Article 5): General office, research and development, engineering, laboratory, storage and/or warehouse uses, including, but not limited to, administrative offices and other lawful uses reasonably related to or incidental to such specified uses consistent with the character of the building as of the date of this Lease and in compliance with, and subject to, applicable laws and the terms of this Lease.

8. Security Deposit (Article 21): $167,111.00, subject to reduction pursuant to the express terms of Section 21.2 below.

9. Parking Pass Ratio (Article 28): 3.2 unreserved parking passes, for every 1,000 rentable square feet of the Premises.

10. Address of Tenant (Section 29.18):

Giga-tronics Incorporated
4650 Norris Canyon Road
San Ramon, CA 94583
Attention: Temi Oduozor
(Prior to Lease Commencement Date)

and

Giga-tronics Incorporated
5990 Gleason Drive
Dublin, California 94568
Attention: Temi Oduozor
(After Lease Commencement Date)

11. Address of Landlord (Section 29.18): See Section 29.18 of the Lease.

12. Brokers (Section 29.24): **Landlord**:

Jones Lang LaSalle
1331 N. California Boulevard
Walnut Creek, California 94596

Tenant:

Colliers International
3825 Hopyard Road, Suite 195
Pleasanton, California 94588

ARTICLE 1

PREMISES, BUILDING, PROJECT, AND COMMON AREAS

1.1 Premises, Building, Project and Common Areas.

1.1.1 The Premises. Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the premises set forth in Section 2.2 of the Summary (the "**Premises**"). The outline of the Premises is set forth in **Exhibit A** attached hereto and each floor or floors of the Premises has the number of rentable square feet as set forth in Section 2.2 of the Summary. The parties hereto agree that the lease of the Premises is upon and subject to the terms, covenants and conditions herein set forth, and Tenant covenants as a material part of the consideration for this Lease to keep and perform each and all of such terms, covenants and conditions by it to be kept and performed and that this Lease is made upon the condition of such performance. The parties hereto hereby acknowledge that the purpose of **Exhibit A** is to show the approximate location of the Premises in the "Building," as that term is defined in Section 1.1.2, below, only, and such Exhibit is not meant to constitute an agreement, representation or warranty as to the construction of the Premises, the precise area thereof or the specific location of the "Common Areas," as that term is defined in Section 1.1.3, below, or the elements thereof or of the access ways to the Premises or the "Project," as that term is defined in Section 1.1.2, below. Except as specifically set forth in this Lease and in the Tenant Work Letter, Landlord shall not be obligated to provide or pay for any improvement work or services related to the improvement of the Premises. Tenant also acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty regarding the condition of the Premises, the Building or the Project or with respect to the suitability of any of the foregoing for the conduct of Tenant's business, except as specifically set forth in this Lease and the Tenant Work Letter. The taking of possession of the Premises by Tenant shall conclusively establish that the Premises and the Building were at such time in good and sanitary order, condition and repair. For purposes of Section 1938 of the California Civil Code, Landlord hereby discloses to Tenant, and Tenant hereby acknowledges, that the Premises have not undergone inspection by a Certified Access Specialist (CASp).

1.1.2 The Building and The Project. The Premises are a part of the building set forth in Section 2.1 of the Summary (the "**Building**"). The Building is part of an office project known as "*Creekside Business Park*". The term "**Project**," as used in this Lease, shall mean (i) the Building and the adjacent building with the address of 5875 Arnold Road (the "**Adjacent Building**") and the Common Areas, (ii) the land (which is improved with landscaping and other improvements) upon which the Building and the Common Areas are located, and (iii) at Landlord's discretion, any additional real property, areas, land, buildings or other improvements added thereto outside of the Project.

1.1.3 Common Areas. Tenant shall have the non-exclusive right to use in common with other tenants in the Project, and subject to the rules and regulations referred to in Article 5 of this Lease, those portions of the Project which are provided, from time to time, for use in common by Landlord, Tenant and any other tenants of the Project (such areas, together with such other portions of the Project designated by Landlord, in its discretion, including certain areas designated for the exclusive use of certain tenants, or to be shared by Landlord and certain tenants, are collectively referred to herein as the "**Common Areas**"). The Common Areas shall consist of the "Project Common Areas" and the "Building Common Areas." The term "**Project Common Areas**," as used in this Lease, shall mean the portion of the Project designated as such by Landlord. The term "**Building Common Areas**," as used in this Lease, shall mean the portions of the Common Areas located within the Building designated as such by Landlord. The manner in which the Common Areas are maintained and operated shall be at the sole discretion of Landlord and the use thereof shall be subject to such rules, regulations and restrictions as Landlord may make from time to time. Landlord reserves the right to close temporarily, make alterations or additions to, or change the location of elements of the Project and the Common Areas.

1.2 Rentable Square Feet of Premises and Building. For purposes of this Lease, "**rentable square feet**" in the Premises and the Building, as the case may be, shall be calculated pursuant to Landlord's then current method for measuring rentable square footage. Landlord and Tenant hereby stipulate and agree that the rentable area of the Premises is as set forth in Section 2.2 of the Summary.

ARTICLE 2

LEASE TERM; OPTION TERM

2.1 Initial Lease Term. The terms and provisions of this Lease shall be effective as of the date of this Lease. The term of this Lease (the "**Lease Term**") shall be as set forth in Section 3.1 of the Summary, shall commence on the date set forth in Section 3.2 of the Summary (the "**Lease Commencement Date**"), and shall terminate on the date set forth in Section 3.3 of the Summary (the "**Lease Expiration Date**") unless this Lease is sooner terminated as hereinafter provided. If Landlord is unable for any reason to deliver possession of the Premises to Tenant on any specific date, then Landlord shall not be subject to any liability for its failure to do so, and such failure shall not affect the validity of this Lease or the obligations of Tenant hereunder. For purposes of this Lease, the term "**Lease Year**" shall mean each consecutive twelve (12) calendar month period during the Lease Term; provided, however, that the first Lease Year shall commence on the Lease Commencement Date and end on the last day of the month in which the first anniversary of the Lease Commencement Date occurs (or if the Lease Commencement Date is the first day of a calendar month, then the first Lease Year shall commence on the Lease Commencement Date and end on the day immediately preceding the first anniversary of the Lease Commencement Date), and the second and each succeeding Lease Year shall commence on the first day of the next calendar month; and further provided that the last Lease Year shall end on the Lease Expiration Date. At any time during the Lease Term, Landlord may deliver to Tenant a notice in the form as set forth in **Exhibit C**, attached hereto, as a confirmation only of the information set forth therein, which Tenant shall execute and return to Landlord within five (5) days of receipt thereof. Tenant's failure to execute and return such notice to Landlord within such time shall be conclusive upon Tenant that the information set forth in such notice is as specified therein.

2.2 Option Term.

2.2.1 Option Right. Landlord hereby grants Tenant originally named in this Lease (the "**Original Tenant**") one (1) option to extend the Lease Term for a period of five (5) years (the "**Option Term**") with respect to the entire Premises then leased by Tenant. Such option shall be exercisable only by written notice delivered by Tenant to Landlord as provided below, provided that, as of the date of delivery of such notice, Tenant is not in monetary or material non-monetary default beyond applicable notice and grace periods under this Lease. Upon the timely exercise of each such option to extend, the Lease Term shall be extended for a period of five (5) years, on all of the same terms and conditions except that the Base Rent shall be equal to the Option Rent, and except for such other modifications as are then agreed upon by the parties. The rights contained in this Section 2.2 shall be personal to the Original Tenant and may only be exercised by the Original Tenant (and not any other assignee, sublessee or other transferee of the Original Tenant's interest in this Lease other than a Permitted Transferee Assignee).

2.2.2 Option Rent. The rent payable by Tenant during the Option Term (the "**Option Rent**") shall be equal to the "Fair Market Rent" for such space as of the commencement of the Option Term. As used herein, the "**Fair Market Rent**" shall be the rent (including additional rent and considering any "base year" or "expense stop" applicable thereto), including all escalations, at which, as of the commencement of the Option Term, tenants are leasing non-sublease, non-encumbered, non-equity space comparable in size, location and quality to the Premises, for a term of five (5) years, which comparable space is located in the Project and in "Comparable Buildings", as defined below (collectively, the "**Comparable Transactions**"), giving appropriate consideration to the annual rental rates per rentable square foot, the standard of measurement by which the rentable square footage is measured, the ratio of rentable square feet to usable square feet, and taking into consideration only, and granting only, the following concessions (provided that the rent payable in Comparable Deals in which the terms of such Comparable Deals are determined by use of a discounted fair market rate formula shall be equitably increased in order that such Comparable Deals will not reflect a discounted rate): (a) rental abatement concessions, if any, being granted such tenants in connection with such comparable spaces; (b) improvements or allowances provided or to be provided for such comparable space, taking into account the value of the existing improvements in the Premises, such value to be based upon the age, quality and layout of the improvements and the extent to which the same could be utilized by general office users as contrasted with this specific Tenant, (c) Proposition 13 protection, and (d) all other monetary concessions, if any, being granted such tenants in connection with such comparable space; provided, however, that notwithstanding anything to the contrary herein, no consideration shall be given to the (I) any period of rental abatement, if any, granted to tenants in Comparable Deals in connection with the design, permitting and construction of improvements, or (II) fact that Landlord is or is not required to pay a real estate brokerage commission in connection with the applicable term or the fact that the Comparable Deals do or do not involve the payment of real estate brokerage commissions. For purposes of this Lease, "**Comparable Buildings**" shall mean the Building and other first-class institutionally-owned office buildings which are comparable to the Building in terms of age (based upon the date of completion of construction or major renovation as to the building containing the portion of the Premises in question), quality of construction, level of services and amenities (including the type (*e.g.*, surface, covered, subterranean) and amount of parking), size and appearance, and are located in the "**Comparable Area**," which is the Dublin/Pleasanton submarket.

2.2.3 **Exercise of Option**. The option contained in this Section 2.2 shall be exercised by Tenant, if at all, only by Tenant's delivery of written notice to Landlord not more than twelve (12) months and not less than nine (9) months prior to the expiration of the then Lease Term, stating that Tenant is irrevocably exercising its option (the "**Exercise Notice**"). Landlord, after receipt of Tenant's notice, shall deliver notice (the "**Option Rent Notice**") to Tenant not less than eight (8) months prior to the expiration of the then in effect Lease Term, setting forth Landlord's estimate of the Option Rent. Tenant shall have the right, within thirty (30) days after receipt of the Option Rent Notice, to notify Landlord that Tenant accepts the Option Rent as determined by Landlord. If Tenant fails to timely accept the Option Rent as determined by Landlord, then the Option Rent shall be established as provided in Section 2.2.4, below.

2.2.4 **Determination of Market Rent**. In the event Tenant objects to Landlord's determination of Fair Market Rent in connection with the Option Rent, Landlord and Tenant shall attempt to agree upon the Fair Market Rent using reasonable good-faith efforts. If Landlord and Tenant fail to reach agreement within thirty (30) days following Tenant's objection to the Landlord's Fair Market Rent determination (the "**Outside Agreement Date**"), then, within five (5) business days following such Outside Agreement Date, Landlord and Tenant shall each concurrently submit a final, binding determination of the Fair Market Rent to the "Neutral Arbitrator," as that term is defined in Section 2.2.4.1 of this Lease, which determinations shall be submitted to arbitration in accordance with Section 2.2.4.1 through 2.2.4.5, below.

2.2.4.1 Landlord and Tenant shall mutually, reasonably appoint one (1) arbitrator who shall by profession be a real estate broker or appraiser who is disinterested and who shall have been active over the five (5) year period ending on the date of such appointment in the valuation or appraisal of office leases in Comparable Buildings (the "**Neutral Arbitrator**"). The determination of the Neutral Arbitrator shall be limited solely to the issue of whether Landlord's Fair Market Rent calculation or Tenant's Fair Market Rent calculation, each as submitted to the Neutral Arbitrator pursuant to Section 2.2.4, above, is the closest to the actual Fair Market Rent defined in Section 2.2.2, above, as determined by such Neutral Arbitrator. Such Neutral Arbitrator shall be appointed within fifteen (15) days after the applicable Outside Agreement Date. Neither the Landlord nor Tenant may, directly or indirectly, consult with the Neutral Arbitrator prior to or subsequent to his or her appearance. The Neutral Arbitrator shall be retained via an engagement letter jointly prepared by Landlord's counsel and Tenant's counsel.

2.2.4.2 The Neutral Arbitrator shall, within thirty (30) days of his/her appointment, reach a decision as to Fair Market Rent and determine whether the Landlord's Fair Market Rent calculation or Tenant's Fair Market Rent calculation, each as submitted to the Neutral Arbitrator pursuant to Section 2.2.4, above, is closest to the Option Rent as determined by such Neutral Arbitrator and simultaneously publish a ruling ("**Award**"). Following notification of the Award, the Landlord's Fair Market Rent calculation or Tenant's Fair Market Rent calculation, whichever is selected by the Neutral Arbitrator as being closest to Fair Market Rent, shall become the then applicable Option Rent.

2.2.4.3 The Award issued by such Neutral Arbitrator shall be binding upon Landlord and Tenant.

2.2.4.4 If Landlord and Tenant fail to appoint the Neutral Arbitrator within fifteen (15) days after the applicable Outside Agreement Date, either party may petition the presiding judge of the Superior Court of Alameda County to appoint such Neutral Arbitrator subject to the criteria in Section 2.2.4.1 of this Lease, or if he or she refuses to act, either party may petition any judge having jurisdiction over the parties to appoint such Neutral Arbitrator.

2.2.4.5 The cost of the Neutral Arbitrator shall be paid by Landlord and Tenant equally.

ARTICLE 3

BASE RENT

3.1 **Base Rent**. Tenant shall pay, without prior notice or demand and without deduction, setoff or counterclaim, to Landlord or Landlord's agent at Landlord's address, or, at Landlord's option, at such other place as Landlord may from time to time designate in writing, by a check for currency which, at the time of payment, is legal tender for private or public debts in the United States of America, base rent ("**Base Rent**") as set forth in Section 4 of the Summary, payable in equal monthly installments as set forth in Section 4 of the Summary in advance on or before the first day of each and every calendar month during the Lease Term. The Base Rent for the first full month of the Lease Term which occurs after the expiration of any free rent period shall be paid at the time of Tenant's execution of this Lease. If any Rent payment date (including the Lease Commencement Date) falls on a day of the month other than the first day of such month or if any payment of Rent is for a period which is shorter than one month, the Rent for any fractional month shall accrue on a daily basis for the period from the date such payment is due to the end of such calendar month or to the end of the Lease Term at a rate per day which is equal to 1/365 of the applicable annual Rent. All other payments or adjustments required to be made under the terms of this Lease that require proration on a time basis shall be prorated on the same basis.

3.2 **Abated Rent**. Provided that Tenant is not then in default of the Lease, after expiration of any applicable notice and cure periods, then during the five (5) month period commencing on the Lease Commencement Date and ending on date that is five (5) months thereafter (the "**Rent Abatement Period**"), Tenant shall not be obligated to pay any Base Rent otherwise attributable to the Premises during such Rent Abatement Period (the "**Rent Abatement**"). Tenant acknowledges and agrees that the foregoing Rent Abatement has been granted to Tenant as additional consideration for entering into this Lease, and for agreeing to pay the Rent and perform the terms and conditions otherwise required under this Lease. If Tenant shall be in default under the Lease, after expiration of any applicable notice and cure period, or if the Lease is terminated as a result of an Event of Default by Tenant, then Landlord may at its option, by notice to Tenant, elect, in addition to any other remedies Landlord may have under this Lease, that the dollar amount of the unapplied portion of the Rent Abatement as of the date of such termination shall be converted to a credit to be applied to the Base Rent applicable at the end of the Lease Term and Tenant shall immediately be obligated to pay Base Rent for the Premises in full.

ARTICLE 4

ADDITIONAL RENT

4.1 **General Terms**.

4.1.1 **Direct Expenses; Additional Rent**. In addition to paying the Base Rent specified in Article 3 of this Lease, Tenant shall pay "Tenant's Share" of the annual "Direct Expenses," as those terms are defined in Sections 4.2.6 and 4.2.2 of this Lease, respectively. Such payments by Tenant, together with any and all other amounts payable by Tenant to Landlord pursuant to the terms of this Lease, are hereinafter collectively referred to as the "**Additional Rent**", and the Base Rent and the Additional Rent are herein collectively referred to as "**Rent**." All amounts due under this Article 4 as Additional Rent shall be payable for the same periods and in the same manner as the Base Rent. Without limitation on other obligations of Tenant which survive the expiration of the Lease Term, the obligations of Tenant to pay the Additional Rent provided for in this Article 4 shall survive the expiration of the Lease Term.

4.1.2 **Triple Net Lease**. Landlord and Tenant acknowledge that, except as otherwise provided to the contrary in this Lease, it is their intent and agreement that this Lease be a "TRIPLE NET" lease and that as such, the provisions contained in this Lease are intended to pass on to Tenant or reimburse Landlord for the costs and expenses reasonably associated with this Lease, the Building and the Project, and Tenant's operation therefrom. To the extent such costs and expenses payable by Tenant cannot be charged directly to, and paid by, Tenant, such costs and expenses shall be paid by Landlord but reimbursed by Tenant as Additional Rent.

4.2 Definitions of Key Terms Relating to Additional Rent. As used in this Article 4, the following terms shall have the meanings hereinafter set forth:

4.2.1 [Intentionally Omitted]

4.2.2 "**Direct Expenses**" shall mean "Operating Expenses" and "Tax Expenses."

4.2.3 "**Expense Year**" shall mean each calendar year in which any portion of the Lease Term falls, through and including the calendar year in which the Lease Term expires, provided that Landlord, upon notice to Tenant, may change the Expense Year from time to time to any other twelve (12) consecutive month period, and, in the event of any such change, Tenant's Share of Direct Expenses shall be equitably adjusted for any Expense Year involved in any such change.

4.2.4 "**Operating Expenses**" shall mean all expenses, costs and amounts of every kind and nature which Landlord pays or accrues during any Expense Year because of or in connection with the ownership, management, maintenance, security, repair, replacement, restoration or operation of the Project, or any portion thereof. Without limiting the generality of the foregoing, Operating Expenses shall specifically include any and all of the following: (i) the cost of supplying all utilities (but excluding the cost of electricity consumed in the Premises and the premises of other tenants of the Building (as opposed to the Common Areas) since Tenant is separately paying for the cost of electricity services pursuant to Section 6.1.2 of the Lease), the cost of operating, repairing, maintaining, and renovating the utility, telephone, mechanical, sanitary, storm drainage, and elevator systems, and the cost of maintenance and service contracts in connection therewith; (ii) the cost of licenses, certificates, permits and inspections and the cost of contesting any governmental enactments which may affect Operating Expenses, and the costs incurred in connection with a governmentally mandated transportation system management program or similar program; (iii) the cost of all insurance carried by Landlord in connection with the Project as reasonably determined by Landlord; (iv) the cost of landscaping, relamping, and all supplies, tools, equipment and materials used in the operation, repair and maintenance of the Project, or any portion thereof; (v) the cost of parking area operation, repair, restoration, and maintenance; (vi) fees and other costs, including management and/or incentive fees, consulting fees, legal fees and accounting fees, of all contractors and consultants in connection with the management, operation, maintenance and repair of the Project; (vii) payments under any equipment rental agreements and the fair rental value of any management office space; (viii) subject to item (f), below, wages, salaries and other compensation and benefits, including taxes levied thereon, of all persons engaged in the operation, maintenance and security of the Project; (ix) costs under any instrument pertaining to the sharing of costs by the Project; (x) operation, repair, maintenance and replacement of all systems and equipment and components thereof of the Project; (xi) the cost of janitorial (but excluding the cost of providing janitorial service to the Premises and the premises of other tenants of the Building (as opposed to the Common Areas) since Tenant is separately paying for the cost of providing janitorial services to the Premises pursuant to Section 6.2 of this Lease), alarm, security and other services, replacement of wall and floor coverings, ceiling tiles and fixtures in common areas, maintenance and replacement of curbs and walkways, repair to roofs and re-roofing; (xii) amortization (including interest on the unamortized cost) over such period of time as Landlord shall reasonably determine, of the cost of acquiring or the rental expense of personal property used in the maintenance, operation and repair of the Project, or any portion thereof; (xiii) the cost of capital improvements or other costs incurred in connection with the Project (A) which are intended to effect economies in the operation or maintenance of the Project, or any portion thereof, or to reduce current or future Operating Expenses, or to enhance the safety or security of the Project or its occupants, (B) that are required to comply with present or anticipated conservation programs, (C) which are performed for the purpose of enhancing the general security, health, safety and/or welfare of the occupants of the Project, (D) that are less than $25,000 or have a useful life of less than five (5) years, or (E) that are required under any governmental law or regulation; provided, however, that any capital expenditure shall be amortized (including interest on the amortized cost) over such period of time as Landlord shall reasonably determine; and (xiv) costs, fees, charges or assessments imposed by, or resulting from any mandate imposed on Landlord by, any federal, state or local government for fire and police protection, trash removal, community services, or other services which do not constitute "Tax Expenses" as that term is defined in Section 4.2.5, below, (xv) cost of tenant relation programs reasonably established by Landlord, and (xvi) payments under any easement, license, operating agreement, declaration, restrictive covenant, or instrument pertaining to the sharing of costs by the Building, including, without limitation, any covenants, conditions and restrictions affecting the property, and reciprocal easement agreements affecting the property, any parking licenses, and any agreements with transit agencies affecting the Property (collectively, "**Underlying Documents**"). Notwithstanding the foregoing, for purposes of this Lease, Operating Expenses shall not, however, include:

(a) costs, including legal fees, space planners' fees, advertising and promotional expenses (except as otherwise set forth above), and brokerage fees incurred in connection with the original construction or development, or original or future leasing of the Project, and costs, including permit, license and inspection costs, incurred with respect to the installation of tenant improvements made for new tenants initially occupying space in the Project after the Lease Commencement Date or incurred in renovating or otherwise improving, decorating, painting or redecorating vacant space for tenants or other occupants of the Project (excluding, however, such costs relating to any common areas of the Project or the parking facilities);

(b) except as set forth in items (xii), (xiii), and (xiv) above, depreciation, interest and principal payments on mortgages and other debt costs, if any, penalties and interest, costs of capital repairs and alterations, and costs of capital improvements and equipment;

(c) costs for which the Landlord is reimbursed by any tenant or occupant of the Project or by insurance by its carrier or any tenant's carrier or by anyone else, and electric power costs for which any tenant directly contracts with the local public service company;

(d) any bad debt loss, rent loss, or reserves for bad debts or rent loss;

(e) costs associated with the operation of the business of the partnership or entity which constitutes the Landlord, as the same are distinguished from the costs of operation of the Project (which shall specifically include, but not be limited to, accounting costs associated with the operation of the Project). Costs associated with the operation of the business of the partnership or entity which constitutes the Landlord include costs of partnership accounting and legal matters, costs of defending any lawsuits with any mortgagee (except as the actions of the Tenant may be in issue), costs of selling, syndicating, financing, mortgaging or hypothecating any of the Landlord's interest in the Project, and costs incurred in connection with any disputes between Landlord and its employees, between Landlord and Project management, or between Landlord and other tenants or occupants;

(f) the wages and benefits of any employee who does not devote substantially all of his or her employed time to the Project unless such wages and benefits are prorated to reflect time spent on operating and managing the Project vis-a-vis time spent on matters unrelated to operating and managing the Project; provided, that in no event shall Operating Expenses for purposes of this Lease include wages and/or benefits attributable to personnel above the level of general manager;

(g) amount, if any, paid as ground rental for the Project by the Landlord;

(h) except for a Project management fee, overhead and profit increment paid to the Landlord or to subsidiaries or affiliates of the Landlord for services in the Project to the extent the same exceeds the costs of such services rendered by qualified, first-class unaffiliated third parties on a competitive basis;

(i) any compensation paid to clerks, attendants or other persons in commercial concessions operated by the Landlord, provided that any compensation paid to any concierge at the Project shall be includable as an Operating Expense;

(j) rentals and other related expenses incurred in leasing air conditioning systems, elevators or other equipment which if purchased the cost of which would be excluded from Operating Expenses as a capital cost, except equipment not affixed to the Project which is used in providing janitorial or similar services and, further excepting from this exclusion such equipment rented or leased to remedy or ameliorate an emergency condition in the Project;

(k) all items and services for which Tenant or any other tenant in the Project reimburses Landlord or which Landlord provides selectively to one or more tenants (other than Tenant) without reimbursement;

(l) any costs expressly excluded from Operating Expenses elsewhere in this Lease;

(m) rent for any office space occupied by Project management personnel to the extent the size or rental rate of such office space exceeds the size or fair market rental value of office space occupied by management personnel of the comparable buildings in the vicinity of the Building, with adjustment where appropriate for the size of the applicable project;

(n) costs arising from property damage resulting from the gross negligence or willful misconduct of Landlord or its agents, employees, vendors, contractors, or providers of materials or services; and

(o) costs incurred to comply with laws relating to the removal of hazardous material (as defined under applicable law) which was in existence in the Building or on the Project prior to the Lease Commencement Date, and was of such a nature that a federal, State or municipal governmental authority, if it had then had knowledge of the presence of such hazardous material, in the state, and under the conditions that it then existed in the Building or on the Project, would have then required the removal of such hazardous material or other remedial or containment action with respect thereto; and costs incurred to remove, remedy, contain, or treat hazardous material, which hazardous material is brought into the Building or onto the Project after the date hereof by Landlord or any other tenant of the Project and is of such a nature, at that time, that a federal, State or municipal governmental authority, if it had then had knowledge of the presence of such hazardous material, in the state, and under the conditions, that it then exists in the Building or on the Project, would have then required the removal of such hazardous material or other remedial or containment action with respect thereto.

If Landlord is not furnishing any particular work or service (the cost of which, if performed by Landlord, would be included in Operating Expenses) to a tenant who has undertaken to perform such work or service in lieu of the performance thereof by Landlord, Operating Expenses shall be deemed to be increased by an amount equal to the additional Operating Expenses which would reasonably have been incurred during such period by Landlord if it had at its own expense furnished such work or service to such tenant. If the Project is not at least one hundred percent (100%) occupied during all or a portion of any Expense Year, Landlord shall make an appropriate adjustment to the components of Operating Expenses for such year to determine the amount of Operating Expenses that would have been incurred had the Project been one hundred percent (100%) occupied; and the amount so determined shall be deemed to have been the amount of Operating Expenses for such year.

4.2.5 Taxes.

4.2.5.1 "**Tax Expenses**" shall mean all federal, state, county, or local governmental or municipal taxes, fees, charges or other impositions of every kind and nature, whether general, special, ordinary or extraordinary, (including, without limitation, real estate taxes, real estate excise taxes, general and special assessments, transit taxes, leasehold taxes or taxes based upon the receipt of rent, including gross receipts or sales taxes applicable to the receipt of rent, unless required to be paid by Tenant, personal property taxes imposed upon the fixtures, machinery, equipment, apparatus, systems and equipment, appurtenances, furniture and other personal property used in connection with the Project, or any portion thereof), which shall be paid or accrued during any Expense Year (without regard to any different fiscal year used by such governmental or municipal authority) because of or in connection with the ownership, leasing and operation of the Project, or any portion thereof.

4.2.5.2 Tax Expenses shall include, without limitation: (i) Any tax on the rent, right to rent or other income from the Project, or any portion thereof, or as against the business of leasing the Project, or any portion thereof; (ii) Any assessment, tax, fee, levy or charge in addition to, or in substitution, partially or totally, of any assessment, tax, fee, levy or charge previously included within the definition of real property tax, it being acknowledged by Tenant and Landlord that Proposition 13 was adopted by the voters of the State of California in the June 1978 election ("**Proposition 13**") and that assessments, taxes, fees, levies and charges may be imposed by governmental agencies for such services as fire protection, street, sidewalk and road maintenance, refuse removal and for other governmental services formerly provided without charge to property owners or occupants, and, in further recognition of the decrease in the level and quality of governmental services and amenities as a result of Proposition 13, Tax Expenses shall also include any governmental or private assessments or the Project's contribution towards a governmental or private cost-sharing agreement for the purpose of augmenting or improving the quality of services and amenities normally provided by governmental agencies; (iii) Any assessment, tax, fee, levy, or charge allocable to or measured by the area of the Premises or the Rent payable hereunder, including, without limitation, any business or gross income tax or excise tax with respect to the receipt of such rent, or upon or with respect to the possession, leasing, operating, management, maintenance, alteration, repair, use or occupancy by Tenant of the Premises, or any portion thereof; and (iv) Any assessment, tax, fee, levy or charge, upon this transaction or any document to which Tenant is a party, creating or transferring an interest or an estate in the Premises or the improvements thereon. All assessments which can be paid by Landlord in installments, shall be paid by Landlord in the maximum number of installments permitted by law (except to the extent inconsistent with the general practice of landlords of the Comparable Buildings) and shall be included as Tax Expenses in the year in which the installment is actually paid.

4.2.5.3 Any costs and expenses (including, without limitation, reasonable attorneys' and consultants' fees) incurred in attempting to protest, reduce or minimize Tax Expenses shall be included in Tax Expenses in the Expense Year such expenses are incurred. Tax refunds shall be credited against Tax Expenses and refunded to Tenant regardless of when received, based on the Expense Year to which the refund is applicable, provided that in no event shall the amount to be refunded to Tenant for any such Expense Year exceed the total amount paid by Tenant as Additional Rent under this Article 4 for such Expense Year. If Tax Expenses for any period during the Lease Term or any extension thereof are increased after payment thereof for any reason, including, without limitation, error or reassessment by applicable governmental or municipal authorities, Tenant shall pay Landlord upon demand Tenant's Share of any such increased Tax Expenses. Notwithstanding anything to the contrary contained in this Section 4.2.5 (except as set forth in Section 4.2.5.1, above), there shall be excluded from Tax Expenses (i) all excess profits taxes, franchise taxes, gift taxes, capital stock taxes, inheritance and succession taxes, estate taxes, federal and state income taxes, and other taxes to the extent applicable to Landlord's general or net income (as opposed to rents, receipts or income attributable to operations at the Project), (ii) any items included as Operating Expenses, and (iii) any items paid by Tenant under Section 4.5 of this Lease, and (iv) tax penalties incurred as a result of Landlord's failure to make payments and/or to file any tax or informational returns when due.

4.2.6 "**Tenant's Share**" shall mean the percentage set forth in Section 6 of the Summary.

4.3 Allocation of Direct Expenses and Cost Pools.

4.3.1 Allocation of Direct Expenses. The parties acknowledge that the Building is a part of a multi-building project and that the costs and expenses incurred in connection with the Project (i.e., the Direct Expenses) should be shared between the Building and the other buildings in the Project. Accordingly, as set forth in Section 4.2 above, Direct Expenses (which consist of Operating Expenses and Tax Expenses) are determined annually for the Project as a whole, and a portion of the Direct Expenses, which portion shall be determined by Landlord on an equitable basis, shall be allocated to the Building (as opposed to other buildings in the Project). Such portion of Direct Expenses allocated to the Building shall include all Direct Expenses attributable solely to the Building and an equitable portion of the Direct Expenses attributable to the Project as a whole, and shall not include Direct Expenses attributable solely to other buildings in the Project.

4.3.2 Cost Pools. Landlord shall have the right, from time to time, to equitably allocate some or all of the Direct Expenses for the Project among different portions or occupants of the Project (the "**Cost Pools**"), in Landlord's reasonable discretion. Such Cost Pools may include, but shall not be limited to, the office space tenants of a building of the Project or of the Project, and the retail space tenants of a building of the Project or of the Project. The Direct Expenses within each such Cost Pool shall be allocated and charged to the tenants within such Cost Pool in an equitable manner.

4.4 Calculation and Payment of Additional Rent. Tenant shall pay to Landlord, in the manner set forth in Section 4.4.1, below, and as Additional Rent, Tenant's Share of Direct Expenses for each Expense Year.

4.4.1 Statement of Actual Direct Expenses and Payment by Tenant. Landlord shall endeavor to give to Tenant following the end of each Expense Year, a statement (the "**Statement**") which shall state the Direct Expenses incurred or accrued for such preceding Expense Year, and which shall indicate the amount of Tenant's Share of Direct Expenses. Upon receipt of the Statement for each Expense Year commencing or ending during the Lease Term, Tenant shall pay, with its next installment of Base Rent due, the full amount of Tenant's Share of Direct Expenses for such Expense Year, less the amounts, if any, paid during such Expense Year as "**Estimated Direct Expenses**," as that term is defined in Section 4.4.2, below, and if Tenant paid more as Estimated Direct Expenses than the actual Tenant's Share of Direct Expenses, Tenant shall receive a credit in the amount of Tenant's overpayment against Rent next due under this Lease. The failure of Landlord to timely furnish the Statement for any Expense Year shall not prejudice Landlord or Tenant from enforcing its rights under this Article 4. Even though the Lease Term has expired and Tenant has vacated the Premises, when the final determination is made of Tenant's Share of Direct Expenses for the Expense Year in which this Lease terminates, Tenant shall immediately pay to Landlord such amount, and if Tenant paid more as Estimated Direct Expenses than the actual Tenant's Share of Direct Expenses, Landlord shall, within thirty (30) days, deliver a check payable to Tenant in the amount of the overpayment. The provisions of this Section 4.4.1 shall survive the expiration or earlier termination of the Lease Term.

4.4.2 **Statement of Estimated Direct Expenses**. In addition, Landlord shall endeavor to give Tenant a yearly expense estimate statement (the "**Estimate Statement**") which shall set forth Landlord's reasonable estimate (the "**Estimate**") of what the total amount of Direct Expenses for the then-current Expense Year shall be and the estimated Tenant's Share of Direct Expenses (the "**Estimated Direct Expenses**"). The failure of Landlord to timely furnish the Estimate Statement for any Expense Year shall not preclude Landlord from enforcing its rights to collect any Estimated Direct Expenses under this Article 4, nor shall Landlord be prohibited from revising any Estimate Statement or Estimated Direct Expenses theretofore delivered to the extent necessary. Thereafter, Tenant shall pay, with its next installment of Base Rent due, a fraction of the Estimated Direct Expenses for the then-current Expense Year (reduced by any amounts paid pursuant to the last sentence of this Section 4.4.2). Such fraction shall have as its numerator the number of months which have elapsed in such current Expense Year, including the month of such payment, and twelve (12) as its denominator. Until a new Estimate Statement is furnished (which Landlord shall have the right to deliver to Tenant at any time), Tenant shall pay monthly, with the monthly Base Rent installments, an amount equal to one-twelfth (1/12) of the total Estimated Direct Expenses set forth in the previous Estimate Statement delivered by Landlord to Tenant.

4.5 **Taxes and Other Charges for Which Tenant Is Directly Responsible**.

4.5.1 Tenant shall be liable for and shall pay ten (10) days before delinquency, taxes levied against Tenant's equipment, furniture, fixtures and any other personal property located in or about the Premises. If any such taxes on Tenant's equipment, furniture, fixtures and any other personal property are levied against Landlord or Landlord's property or if the assessed value of Landlord's property is increased by the inclusion therein of a value placed upon such equipment, furniture, fixtures or any other personal property and if Landlord pays the taxes based upon such increased assessment, which Landlord shall have the right to do regardless of the validity thereof but only under proper protest if requested by Tenant, Tenant shall upon demand repay to Landlord the taxes so levied against Landlord or the proportion of such taxes resulting from such increase in the assessment, as the case may be.

4.5.2 If the tenant improvements in the Premises, whether installed and/or paid for by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, are assessed for real property tax purposes at a valuation higher than the valuation at which tenant improvements conforming to Landlord's "building standard" in other space in the Building are assessed, then the Tax Expenses levied against Landlord or the property by reason of such excess assessed valuation shall be deemed to be taxes levied against personal property of Tenant and shall be governed by the provisions of Section 4.5.1, above.

4.5.3 Notwithstanding any contrary provision herein, Tenant shall pay prior to delinquency any (i) rent tax or sales tax, service tax, transfer tax or value added tax, or any other applicable tax on the rent or services herein or otherwise respecting this Lease, (ii) taxes assessed upon or with respect to the possession, leasing, operation, management, maintenance, alteration, repair, use or occupancy by Tenant of the Premises or any portion of the Project, including the Parking Facility; or (iii) taxes assessed upon this transaction or any document to which Tenant is a party creating or transferring an interest or an estate in the Premises.

ARTICLE 5

USE OF PREMISES

5 . 1 Permitted Use. Tenant shall use the Premises solely for the Permitted Use set forth in Section 7 of the Summary and Tenant shall not use or permit the Premises or the Project to be used for any other purpose or purposes whatsoever without the prior written consent of Landlord, which may be withheld in Landlord's sole discretion.

5.2 Prohibited Uses. Tenant further covenants and agrees that Tenant shall not use, or suffer or permit any person or persons to use, the Premises or any part thereof for any use or purpose contrary to the provisions of the Rules and Regulations set forth in **Exhibit D**, attached hereto, or in violation of the laws of the United States of America, the State of California, or the ordinances, regulations or requirements of the local municipal or county governing body or other lawful authorities having jurisdiction over the Project) including, without limitation, any such laws, ordinances, regulations or requirements relating to hazardous materials or substances, as those terms are defined by applicable laws now or hereafter in effect, or any Underlying Documents. Tenant shall not do or permit anything to be done in or about the Premises which will in any way damage the reputation of the Project or obstruct or interfere with the rights of other tenants or occupants of the Building, or injure or annoy them or use or allow the Premises to be used for any improper, unlawful or objectionable purpose, nor shall Tenant cause, maintain or permit any nuisance in, on or about the Premises. Tenant shall comply with, and Tenant's rights and obligations under the Lease and Tenant's use of the Premises shall be subject and subordinate to, all recorded easements, covenants, conditions, and restrictions now or hereafter affecting the Project.

ARTICLE 6

SERVICES AND UTILITIES

6 . 1 In General. Tenant will be responsible, at its sole cost and expense, for the furnishing of all services and utilities to the Premises, including, but not limited to heating, ventilation and air-conditioning, electricity, water, telephone, janitorial and interior Building security services.

6.1.1 All utilities (including without limitation, electricity, gas, sewer and water) to the Building are separately metered at the Premises and shall be paid directly by Tenant to the applicable utility provider.

6.1.2 Landlord shall provide janitorial services to the Common Areas, except the date of observation of the Holidays, and window washing services in a manner consistent with other comparable buildings in the vicinity of the Building. All cleaning and janitorial services for the Premises shall be provided, at Tenant's sole cost and expense, exclusively by or through Tenant (provided that Tenant shall contract for such services utilizing the Building janitorial contractor) in accordance with the provisions of this Lease. Tenant shall not cause any unnecessary labor by carelessness or indifference to the good order and cleanliness of the Premises. If Tenant fails to provide at least weekly janitorial service for the Premises, Landlord shall have the right to do so, at Tenant's sole cost, and Tenant shall reimburse Landlord for such cost within ten (10) days of billing. Landlord shall have the right, from time to time, to change its designated janitorial services provider for the Building, in which event Tenant shall terminate its contract with Landlord’s previously designated janitorial services provider and enter into a contract with Landlord’s newly designated janitorial services provider. Landlord shall have the right to inspect the Premises for purposes of confirming that Tenant is cleaning the Premises as required by this Section 6.2, and to require Tenant to provide additional cleaning, if necessary. In the event Tenant shall fail to provide any of the services described in this Section 6.2 within five (5) days after notice from Landlord, which notice shall not be required in the event of an emergency, Landlord shall have the right to provide such services and any charge or cost incurred by Landlord in connection therewith shall be deemed Additional Rent due and payable by Tenant upon receipt by Tenant of a written statement of cost from Landlord. Failure of Tenant to comply with any one or more of the foregoing provisions shall be deemed to be a default under this Lease.

Tenant shall cooperate fully with Landlord at all times and abide by all regulations and requirements that Landlord may reasonably prescribe for the proper functioning and protection of the HVAC, electrical, mechanical and plumbing systems. Provided that Landlord agrees to provide and maintain and keep in continuous service utility connections to the Project, including electricity, water and sewage connections, Landlord shall have no obligation to provide any services or utilities to the Building, including, but not limited to heating, ventilation and air-conditioning, electricity, water, telephone, janitorial and interior Building security services.

6.2 **Interruption of Use**. Tenant agrees that Landlord shall not be liable for damages, by abatement of Rent or otherwise, for failure to furnish or delay in furnishing any service (including telephone and telecommunication services), or for any diminution in the quality or quantity thereof, when such failure or delay or diminution is occasioned, in whole or in part, by breakage, repairs, replacements, or improvements, by any strike, lockout or other labor trouble, by inability to secure electricity, gas, water, or other fuel at the Building or Project after reasonable effort to do so, by any riot or other dangerous condition, emergency, accident or casualty whatsoever, by act or default of Tenant or other parties, or by any other cause beyond Landlord's reasonable control; and such failures or delays or diminution shall never be deemed to constitute an eviction or disturbance of Tenant's use and possession of the Premises or relieve Tenant from paying Rent or performing any of its obligations under this Lease. Furthermore, Landlord shall not be liable under any circumstances for a loss of, or injury to, property or for injury to, or interference with, Tenant's business, including, without limitation, loss of profits, however occurring, through or in connection with or incidental to a failure to furnish any of the services or utilities as set forth in this Article 6.

ARTICLE 7

REPAIRS

7.1 **Tenant Repair Obligations**. Tenant shall, throughout the Lease Term, at its sole cost and expense, maintain, repair, replace and improve as required, the Premises and Building and every part thereof in a good standard of maintenance, repair and replacement as required, and in good and sanitary condition, all in accordance with the standards of a first class office building, except for Landlord Repair Obligations, whether or not such maintenance, repair, replacement or improvement is required in order to comply with Applicable Laws ("**Tenant's Repair Obligations**"), including, without limitation, the following: (1) glass, windows, window frames, window casements (including the repairing, resealing, cleaning and replacing of both interior and exterior windows) and skylights; (2) interior and exterior doors, door frames and door closers; (3) interior lighting (including, without limitation, light bulbs and ballasts); (4) the plumbing, sewer, drainage, electrical, fire protection, elevator, escalator, life safety and security systems and equipment, existing heating, ventilation and air-conditioning systems, and all other mechanical, electrical and communications systems and equipment (collectively, the "**Building Systems**"), including without limitation (i) any specialty or supplemental Building Systems installed by or for Tenant and (ii) all electrical facilities and equipment, including lighting fixtures, lamps, fans and any exhaust equipment and systems, electrical motors and all other appliances and equipment of every kind and nature located in, upon or about the Premises; (5) all communications systems serving the Premises; (6) all of Tenant's security systems in or about or serving the Premises; (7) Tenant's signage; (8) interior demising walls and partitions (including painting and wall coverings), equipment, floors, and any roll-up doors, ramps and dock equipment; and (9) the non-structural portions of the roof of the Building, including the roof membrane and coverings. Tenant's Repair Obligations also includes the routine maintenance of the load bearing and exterior walls of the Building, including, without limitation, any painting, sealing, patching and waterproofing of such walls. Tenant shall additionally be responsible, at Tenant's sole cost and expense, to furnish all expendables, including light bulbs, paper goods and soaps, used in the Premises, and, to the extent that Landlord notifies Tenant in writing of its intention to no longer arrange for such monitoring, cause the fire alarm systems serving the Premises to be monitored by a monitoring or protective services firm approved by Landlord in writing.

7.2 **Service Contracts**. All Building Systems, including HVAC, elevators, main electrical, plumbing and fire/life-safety systems, shall be maintained, repaired and replaced by Tenant (i) in a commercially reasonable first-class condition, (ii) in accordance with any applicable manufacturer specifications relating to any particular component of such Building Systems, (iii) in accordance with applicable Laws. Tenant shall contract with a qualified, experienced professional third party service companies (a "**Service Contract**"). Tenant shall regularly, in accordance with commercially reasonable standards, generate and maintain preventive maintenance records relating to each Building's mechanical and main electrical systems, including life safety, elevators and the central plant ("**Preventative Maintenance Records**"). In addition, upon Landlord's request, Tenant shall deliver a copy of all current Service Contracts to Landlord and/or a copy of the Preventative Maintenance Records.

7.3 Landlord's Right to Perform Tenant's Repair Obligations. Tenant shall notify Landlord in writing at least thirty (30) days prior to performing any material Tenant's Repair Obligations, including without limitation, any Tenant's Repair Obligation which affect the Building Systems or which is reasonably anticipated to cost more than $100,000.00. Upon receipt of such notice from Tenant, Landlord shall have the right to either (i) perform such material Tenant's Repair Obligation by delivering notice of such election to Tenant within thirty (30) days following receipt of Tenant's notice, and Tenant shall pay Landlord the cost thereof (including Landlord's reasonable supervision fee) within thirty (30) days after receipt of an invoice therefor, or (ii) require Tenant to perform such Tenant's Repair Obligation at Tenant's sole cost and expense. If Tenant fails to perform any Tenant's Repair Obligation within a reasonable time period, as reasonably determined by Landlord, then Landlord may, but need not, following delivery of notice to Tenant of such election, make such Tenant Repair Obligation, and Tenant shall pay Landlord the cost thereof, (including Landlord's reasonable supervision fee) within thirty (30) days after receipt of an invoice therefor.

7.4 Landlord Repair Obligations. Landlord shall be responsible for repairs to the exterior walls, foundation and roof of the Building, the structural portions of the floors of the Building, except to the extent that such repairs are required due to the negligence or willful misconduct of Tenant (the "**Landlord Repair Obligation**"); provided, however, that if such repairs are due to the negligence or willful misconduct of Tenant, Landlord shall nevertheless make such repairs at Tenant's expense, or, if covered by Landlord's insurance, Tenant shall only be obligated to pay any deductible in connection therewith.

ARTICLE 8

ADDITIONS AND ALTERATIONS

8.1 Landlord's Consent to Alterations. Tenant may not make any improvements, alterations, additions or changes to the Premises or any mechanical, plumbing or HVAC facilities or systems pertaining to the Premises (collectively, the "**Alterations**") without first procuring the prior written consent of Landlord to such Alterations, which consent shall be requested by Tenant not less than thirty (30) days prior to the commencement thereof, and which consent shall not be unreasonably withheld by Landlord, provided it shall be deemed reasonable for Landlord to withhold its consent to any Alteration which adversely affects the structural portions or the systems or equipment of the Building or is visible from the exterior of the Building. Notwithstanding the foregoing, Tenant shall be permitted to make Alterations following ten (10) business days' notice to Landlord, but without Landlord's prior consent, to the extent that such Alterations are decorative only (*i.e.*, installation of carpeting or painting of the Premises). For purposes of determining the cost of an Alteration, work done in phases or stages shall be considered part of the same Alteration, and any Alteration shall be deemed to include all trades and materials involved in accomplishing a particular result. The construction of the initial improvements to the Premises shall be governed by the terms of the Tenant Work Letter and not the terms of this Article 8.

8.2 Manner of Construction. Landlord may impose, as a condition of its consent to any and all Alterations or repairs of the Premises or about the Premises, such requirements as Landlord in its reasonable discretion may deem desirable, including, but not limited to, the requirement that Tenant utilize for such purposes only contractors, subcontractors, materials, mechanics and materialmen selected by Tenant from a list provided and approved by Landlord, and the requirement that upon Landlord's request, Tenant shall, at Tenant's expense, remove such Alterations upon the expiration or any early termination of the Lease Term. Tenant shall construct such Alterations and perform such repairs in a good and workmanlike manner, in conformance with any and all applicable federal, state, county or municipal laws, rules and regulations and pursuant to a valid building permit, issued by the city in which the Building is located (or other applicable governmental authority), all in conformance with Landlord's construction rules and regulations; provided, however, that prior to commencing to construct any Alteration, Tenant shall meet with Landlord to discuss Landlord's design parameters and code compliance issues. In the event Tenant performs any Alterations in the Premises which require or give rise to governmentally required changes to the "Base Building," as that term is defined below, then (i) such Base Building changes shall be subject to Landlord's prior approval in its sole discretion, (ii) if such changes are approved by Landlord, Landlord shall, at Tenant's expense, make such changes to the Base Building, and (iii) if such Base Building changes are not approved by Landlord, then Tenant shall not have the right to perform such Alterations. The "**Base Building**" shall include the structural portions of the Building, and the public restrooms, elevators, exit stairwells and the systems and equipment located in the internal core of the Building on the floor or floors on which the Premises are located. In performing the work of any such Alterations, Tenant shall have the work performed in such manner so as not to obstruct access to the Project or any portion thereof, by any other tenant of the Project, and so as not to obstruct the business of Landlord or other tenants in the Project. Tenant shall not use (and upon notice from Landlord shall cease using) contractors, services, workmen, labor, materials or equipment that, in Landlord's reasonable judgment, would disturb labor harmony with the workforce or trades engaged in performing other work, labor or services in or about the Building or the Common Areas. In addition to Tenant's obligations under Article 9 of this Lease, upon completion of any Alterations, Tenant agrees to cause a Notice of Completion to be recorded in the office of the Recorder of the County in which the Building is located in accordance with Section 8182 of the Civil Code of the State of California or any successor statute, and Tenant shall deliver to the Project construction manager a reproducible copy of the "as built" drawings of the Alterations as well as all permits, approvals and other documents issued by any governmental agency in connection with the Alterations.

8.3 **Payment for Improvements**. If payment is made by Tenant directly to contractors, Tenant shall (i) comply with Landlord's requirements for final lien releases and waivers in connection with Tenant's payment for work to contractors, and (ii) sign Landlord's standard contractor's rules and regulations. If Tenant orders any work directly from Landlord, Tenant shall pay to Landlord an amount equal to five percent (5%) of the cost of such work to compensate Landlord for all overhead, general conditions, fees and other costs and expenses arising from Landlord's involvement with such work. If Tenant does not order any work directly from Landlord, Tenant shall reimburse Landlord for Landlord's reasonable, actual, out-of-pocket costs and expenses actually incurred in connection with Landlord's review of such work. At Landlord's option, prior to the commencement of construction of any Alteration, Tenant shall provide Landlord with the reasonably anticipated cost thereof, which Landlord shall disburse during construction pursuant to Landlord's standard, commercially reasonable disbursement procedure.

8.4 **Construction Insurance**. In addition to the requirements of Article 10 of this Lease, in the event that Tenant makes any Alterations, prior to the commencement of such Alterations, Tenant shall provide Landlord with evidence that Tenant carries "Builder's All Risk" insurance in an amount approved by Landlord covering the construction of such Alterations, and such other insurance as Landlord may reasonably require, it being understood and agreed that all of such Alterations shall be insured by Tenant pursuant to Article 10 of this Lease immediately upon completion thereof. In addition, Tenant's contractors and subcontractors shall be required to carry Commercial General Liability insurance in an amount approved by Landlord and otherwise in accordance with the requirements of Article 10 of this Lease. Landlord may, in its discretion, require Tenant to obtain a lien and completion bond or some alternate form of security satisfactory to Landlord in an amount sufficient to ensure the lien-free completion of such Alterations and naming Landlord as a co-obligee.

8.5 **Landlord's Property**. All Alterations, improvements, fixtures, equipment and/or appurtenances which may be installed or placed in or about the Premises, from time to time, shall be at the sole cost of Tenant and shall be and become the property of Landlord, except that Tenant may remove any Alterations, improvements, fixtures and/or equipment which Tenant can substantiate to Landlord have not been paid for with any Tenant improvement allowance funds provided to Tenant by Landlord, provided Tenant repairs any damage to the Premises and Building caused by such removal and returns the affected portion of the Premises to a building standard tenant improved condition as determined by Landlord. Furthermore, Landlord may, by written notice to Tenant prior to the end of the Lease Term, or given following any earlier termination of this Lease, require Tenant, at Tenant's expense, to remove any Alterations and/or improvements and/or systems and equipment within the Premises and to repair any damage to the Premises and Building caused by such removal and return the affected portion of the Premises to a building standard tenant improved condition as determined by Landlord. If Tenant fails to complete such removal and/or to repair any damage caused by the removal of any Alterations and/or improvements and/or systems and equipment in the Premises and return the affected portion of the Premises to a building standard tenant improved condition as reasonably determined by Landlord, Landlord may do so and may charge the cost thereof to Tenant. Tenant hereby protects, defends, indemnifies and holds Landlord harmless from any liability, cost, obligation, expense or claim of lien in any manner relating to the installation, placement, removal, or financing of any such Alterations, improvements, fixtures and/or equipment in, on or about the Premises, which obligations of Tenant shall survive the expiration or earlier termination of this Lease.

ARTICLE 9

COVENANT AGAINST LIENS

Tenant shall keep the Project and Premises free from any liens or encumbrances arising out of the work performed, materials furnished or obligations incurred by or on behalf of Tenant, and shall protect, defend, indemnify and hold Landlord harmless from and against any claims, liabilities, judgments or costs (including, without limitation, reasonable attorneys' fees and costs) arising out of same or in connection therewith. Tenant shall give Landlord notice at least twenty (20) days prior to the commencement of any such work on the Premises (or such additional time as may be necessary under applicable laws) to afford Landlord the opportunity of posting and recording appropriate notices of non-responsibility. Tenant shall remove any such lien or encumbrance by bond or otherwise within ten (10) business days after notice by Landlord, and if Tenant shall fail to do so, Landlord may pay the amount necessary to remove such lien or encumbrance, without being responsible for investigating the validity thereof. The amount so paid shall be deemed Additional Rent under this Lease payable upon demand, without limitation as to other remedies available to Landlord under this Lease. Nothing contained in this Lease shall authorize Tenant to do any act which shall subject Landlord's title to the Building or Premises to any liens or encumbrances whether claimed by operation of law or express or implied contract. Any claim to a lien or encumbrance upon the Building or Premises arising in connection with any such work or respecting the Premises not performed by or at the request of Landlord shall be null and void, or at Landlord's option shall attach only against Tenant's interest in the Premises and shall in all respects be subordinate to Landlord's title to the Project, Building and Premises.

ARTICLE 10

INSURANCE

10.1 Indemnification and Waiver. Tenant hereby assumes all risk of damage to property or injury to persons in, upon or about the Premises from any cause whatsoever (including, but not limited to, any personal injuries resulting from a slip and fall in, upon or about the Premises) and agrees that Landlord, its partners, subpartners and their respective officers, agents, servants, employees, and independent contractors (collectively, "**Landlord Parties**") shall not be liable for, and are hereby released from any responsibility for, any damage either to person or property or resulting from the loss of use thereof, which damage is sustained by Tenant or by other persons claiming through Tenant. Tenant shall indemnify, defend, protect, and hold harmless the Landlord Parties from any and all loss, cost, damage, expense and liability (including without limitation court costs and reasonable attorneys' fees) incurred in connection with or arising from any cause in, on or about the Premises (including, but not limited to, a slip and fall), any acts, omissions or negligence of Tenant or of any person claiming by, through or under Tenant, or of the contractors, agents, servants, employees, invitees, guests or licensees of Tenant or any such person, in, on or about the Project or any breach of the terms of this Lease, either prior to, during, or after the expiration of the Lease Term, provided that the terms of the foregoing indemnity shall not apply to the negligence or willful misconduct of Landlord. Should Landlord be named as a defendant in any suit brought against Tenant in connection with or arising out of Tenant's occupancy of the Premises, Tenant shall pay to Landlord its costs and expenses incurred in such suit, including without limitation, its actual professional fees such as reasonable appraisers', accountants' and attorneys' fees. The provisions of this Section 10.1 shall survive the expiration or sooner termination of this Lease with respect to any claims or liability arising in connection with any event occurring prior to such expiration or termination.

10.2 Tenant's Compliance With Landlord's Fire and Casualty Insurance. Tenant shall, at Tenant's expense, comply with all insurance company requirements pertaining to the use of the Premises. If Tenant's conduct or use of the Premises causes any increase in the premium for such insurance policies then Tenant shall reimburse Landlord for any such increase. Tenant, at Tenant's expense, shall comply with all rules, orders, regulations or requirements of the American Insurance Association (formerly the National Board of Fire Underwriters) and with any similar body.

10.3 **Tenant's Insurance**. Tenant shall maintain the following coverages in the following amounts.

10.3.1 Commercial General Liability Insurance on an occurrence form covering the insured against claims of bodily injury, personal injury and property damage (including loss of use thereof) arising out of Tenant's operations, and contractual liabilities (covering the performance by Tenant of its indemnity agreements) including a Broad Form endorsement covering the insuring provisions of this Lease and the performance by Tenant of the indemnity agreements set forth in Section 10.1 of this Lease, and including products and completed operations coverage, for limits of liability on a per location basis of not less than:

Bodily Injury and Property Damage Liability	$5,000,000 each occurrence $5,000,000 annual aggregate
Personal Injury Liability	$5,000,000 each occurrence $5,000,000 annual aggregate 0% Insured's participation

10.3.2 Physical Damage Insurance covering (i) all office furniture, business and trade fixtures, office equipment, free-standing cabinet work, movable partitions, merchandise and all other items of Tenant's property on the Premises installed by, for, or at the expense of Tenant, (ii) the "Tenant Improvements," as that term is defined in the Tenant Work Letter, and any other improvements which exist in the Premises as of the Lease Commencement Date (excluding the Base Building) (the "**Original Improvements**"), and (iii) all other improvements, alterations and additions to the Premises. Such insurance shall be written on an "all risks" of physical loss or damage basis, for the full replacement cost value (subject to reasonable deductible amounts) new without deduction for depreciation of the covered items and in amounts that meet any co-insurance clauses of the policies of insurance and shall include coverage for damage or other loss caused by fire or other peril including, but not limited to, vandalism and malicious mischief, theft, water damage of any type, including sprinkler leakage, bursting or stoppage of pipes, and explosion, and providing business interruption coverage for a period of six (6) months.

10.3.3 Worker's Compensation and Employer's Liability or other similar insurance pursuant to all applicable state and local statutes and regulations.

10.4 **Form of Policies**. The minimum limits of policies of insurance required of Tenant under this Lease shall in no event limit the liability of Tenant under this Lease. Such insurance shall (i) name Landlord, and any other party the Landlord so specifies, as an additional insured, including Landlord's managing agent, if any; (ii) specifically cover the liability assumed by Tenant under this Lease, including, but not limited to, Tenant's obligations under Section 10.1 of this Lease; (iii) be issued by an insurance company having a rating of not less than A-:X in Best's Insurance Guide or which is otherwise acceptable to Landlord and licensed to do business in the State of California; (iv) be primary and noncontributory insurance as to all claims thereunder and provide that any insurance carried by Landlord is excess and is non-contributing with any insurance requirement of Tenant; and (v) be in form and content reasonably acceptable to Landlord. Tenant hereby agrees that in the event of any non-renewal or cancellation of the policies of insurance required herein, Tenant shall provide Landlord with notice of such cancellation immediately upon Tenant's first becoming aware of such cancellation or non-renewal. Tenant shall deliver said policy or policies or certificates thereof to Landlord on or before the Lease Commencement Date and at least ten (10) days before the expiration dates thereof. In the event Tenant shall fail to procure such insurance, or to deliver such policies or certificate, Landlord may, at its option, procure such policies for the account of Tenant, and the cost thereof shall be paid to Landlord within five (5) days after delivery to Tenant of bills therefor.

10.5 **Subrogation**. Landlord and Tenant intend that their respective property loss risks shall be borne by reasonable insurance carriers to the extent above provided, and Landlord and Tenant hereby agree to look solely to, and seek recovery only from, their respective insurance carriers in the event of a property loss to the extent that such coverage is agreed to be provided hereunder. The parties each hereby waive all rights and claims against each other for such losses, and waive all rights of subrogation of their respective insurers, provided such waiver of subrogation shall not affect the right to the insured to recover thereunder. The parties agree that their respective insurance policies are now, or shall be, endorsed such that the waiver of subrogation shall not affect the right of the insured to recover thereunder, so long as no material additional premium is charged therefor.

10.6 **Additional Insurance Obligations**. Tenant shall carry and maintain during the entire Lease Term, at Tenant's sole cost and expense, increased amounts of the insurance required to be carried by Tenant pursuant to this Article 10 and such other reasonable types of insurance coverage and in such reasonable amounts covering the Premises and Tenant's operations therein, as may be reasonably requested by Landlord, but in no event in excess of the amounts and types of insurance then being required by landlords of buildings comparable to and in the vicinity of the Building.

ARTICLE 11

DAMAGE AND DESTRUCTION

11.1 Repair of Damage to Premises by Landlord. Tenant shall promptly notify Landlord of any damage to the Premises resulting from fire or any other casualty. If the Premises or any Common Areas serving or providing access to the Premises shall be damaged by fire or other casualty, Landlord shall promptly and diligently, subject to reasonable delays for insurance adjustment or other matters beyond Landlord's reasonable control, and subject to all other terms of this Article 11, restore the Base Building and such Common Areas. Such restoration shall be to substantially the same condition of the Base Building and the Common Areas prior to the casualty, except for modifications required by zoning and building codes and other laws or by the holder of a mortgage on the Building or Project or any other modifications to the Common Areas deemed desirable by Landlord, which are consistent with the character of the Project, provided that access to the Premises and any common restrooms serving the Premises shall not be materially impaired. Upon the occurrence of any damage to the Premises, upon notice (the "**Landlord Repair Notice**") to Tenant from Landlord, Tenant shall assign to Landlord (or to any party designated by Landlord) all insurance proceeds payable to Tenant under Tenant's insurance required under Section 10.3 of this Lease, and Landlord shall repair any injury or damage to the Tenant Improvements and the Original Improvements installed in the Premises and shall return such Tenant Improvements and Original Improvements to their condition immediately prior to the casualty; provided that if the cost of such repair by Landlord exceeds the amount of insurance proceeds received by Landlord from Tenant's insurance carrier, as assigned by Tenant, the cost of such repairs shall be paid by Tenant to Landlord prior to Landlord's commencement of repair of the damage. In the event that Landlord does not deliver the Landlord Repair Notice within sixty (60) days following the date the casualty becomes known to Landlord, Tenant shall, at its sole cost and expense, repair any injury or damage to the Tenant Improvements and the Original Improvements installed in the Premises and shall return such Tenant Improvements and Original Improvements to their original condition. Whether or not Landlord delivers a Landlord Repair Notice, prior to the commencement of construction, Tenant shall submit to Landlord, for Landlord's review and approval, all plans, specifications and working drawings relating thereto, and Landlord shall select the contractors to perform such improvement work. Landlord shall not be liable for any inconvenience or annoyance to Tenant or its visitors, or injury to Tenant's business resulting in any way from such damage or the repair thereof; provided however, that if such fire or other casualty shall have caused the Premises or Common Areas to be rendered untenantable, and the Premises are not occupied by Tenant as a result thereof, then during the time and to the extent the Premises are unfit for occupancy, the Rent shall be abated in proportion to the ratio that the amount of rentable square feet of the Premises which is unfit for occupancy for the purposes permitted under this Lease bears to the total rentable square feet of the Premises. In the event that Landlord shall not deliver the Landlord Repair Notice, Tenant's right to rent abatement pursuant to the preceding sentence shall terminate as of the date which is reasonably determined by Landlord to be the date Tenant should have completed repairs to the Premises assuming Tenant used reasonable due diligence in connection therewith.

11.2 Landlord's Option to Repair. Notwithstanding the terms of Section 11.1 of this Lease, Landlord may elect not to rebuild and/or restore the Premises, Building and/or Project, and instead terminate this Lease, by notifying Tenant in writing of such termination within sixty (60) days after the date of discovery of the damage, such notice to include a termination date giving Tenant sixty (60) days to vacate the Premises, but Landlord may so elect only if the Building or Project shall be damaged by fire or other casualty or cause, whether or not the Premises are affected, and one or more of the following conditions is present: (i) in Landlord's reasonable judgment, repairs cannot reasonably be completed within two hundred seventy (270) days after the date of discovery of the damage (when such repairs are made without the payment of overtime or other premiums); (ii) the holder of any mortgage on the Building or Project or ground lessor with respect to the Building or Project shall require that the insurance proceeds or any portion thereof be used to retire the mortgage debt, or shall terminate the ground lease, as the case may be; (iii) the damage is not fully covered by Landlord's insurance policies; (iv) Landlord decides to rebuild the Building or Common Areas so that they will be substantially different structurally or architecturally; (v) the damage occurs during the last twelve (12) months of the Lease Term; or (vi) any owner of any other portion of the Project, other than Landlord, does not intend to repair the damage to such portion of the Project; provided, however, that if Landlord does not elect to terminate this Lease pursuant to Landlord's termination right as provided above, and the repairs cannot, in the reasonable opinion of Landlord, be completed within two hundred seventy (270) days after being commenced, Tenant may elect, no earlier than sixty (60) days after the date of the damage and not later than ninety (90) days after the date of such damage, to terminate this Lease by written notice to Landlord effective as of the date specified in the notice, which date shall not be less than thirty (30) days nor more than sixty (60) days after the date such notice is given by Tenant. Notwithstanding the provisions of this Section 11.2, Tenant shall have the right to terminate this Lease under this Section 11.2 only if each of the following conditions are satisfied: (a) the damage to the Project by fire or other casualty was not caused by the gross negligence or intentional act of Tenant or its partners or subpartners and their respective officers, agents, servants, employees, and independent contractors; (b) Tenant is not then in default under this Lease; (c) as a result of the damage, Tenant's use of or ability to conduct business from the Premises is materially impaired; and, (d) as a result of the damage to the Project, Tenant does not occupy or use the Premises at all.

11.3 Waiver of Statutory Provisions. The provisions of this Lease, including this Article 11, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, the Building or the Project, and any statute or regulation of the State of California, including, without limitation, Sections 1932(2) and 1933(4) of the California Civil Code, with respect to any rights or obligations concerning damage or destruction in the absence of an express agreement between the parties, and any other statute or regulation, now or hereafter in effect, shall have no application to this Lease or any damage or destruction to all or any part of the Premises, the Building or the Project.

ARTICLE 12

NONWAIVER

No provision of this Lease shall be deemed waived by either party hereto unless expressly waived in a writing signed thereby. The waiver by either party hereto of any breach of any term, covenant or condition herein contained shall not be deemed to be a waiver of any subsequent breach of same or any other term, covenant or condition herein contained. The subsequent acceptance of Rent hereunder by Landlord shall not be deemed to be a waiver of any preceding breach by Tenant of any term, covenant or condition of this Lease, other than the failure of Tenant to pay the particular Rent so accepted, regardless of Landlord's knowledge of such preceding breach at the time of acceptance of such Rent. No acceptance of a lesser amount than the Rent herein stipulated shall be deemed a waiver of Landlord's right to receive the full amount due, nor shall any endorsement or statement on any check or payment or any letter accompanying such check or payment be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the full amount due. No receipt of monies by Landlord from Tenant after the termination of this Lease shall in any way alter the length of the Lease Term or of Tenant's right of possession hereunder, or after the giving of any notice shall reinstate, continue or extend the Lease Term or affect any notice given Tenant prior to the receipt of such monies, it being agreed that after the service of notice or the commencement of a suit, or after final judgment for possession of the Premises, Landlord may receive and collect any Rent due, and the payment of said Rent shall not waive or affect said notice, suit or judgment.

ARTICLE 13

CONDEMNATION

If the whole or any part of the Premises, Building or Project shall be taken by power of eminent domain or condemned by any competent authority for any public or quasi-public use or purpose, or if any adjacent property or street shall be so taken or condemned, or reconfigured or vacated by such authority in such manner as to require the use, reconstruction or remodeling of any part of the Premises, Building or Project, or if Landlord shall grant a deed or other instrument in lieu of such taking by eminent domain or condemnation, Landlord shall have the option to terminate this Lease effective as of the date possession is required to be surrendered to the authority. If more than twenty-five percent (25%) of the rentable square feet of the Premises is taken, or if access to the Premises is substantially impaired, in each case for a period in excess of one hundred eighty (180) days, Tenant shall have the option to terminate this Lease effective as of the date possession is required to be surrendered to the authority. Tenant shall not because of such taking assert any claim against Landlord or the authority for any compensation because of such taking and Landlord shall be entitled to the entire award or payment in connection therewith, except that Tenant shall have the right to file any separate claim available to Tenant for any taking of Tenant's personal property and fixtures belonging to Tenant and removable by Tenant upon expiration of the Lease Term pursuant to the terms of this Lease, and for moving expenses, so long as such claims do not diminish the award available to Landlord, its ground lessor with respect to the Building or Project or its mortgagee, and such claim is payable separately to Tenant. All Rent shall be apportioned as of the date of such termination. If any part of the Premises shall be taken, and this Lease shall not be so terminated, the Rent shall be proportionately abated. Tenant hereby waives any and all rights it might otherwise have pursuant to Section 1265.130 of The California Code of Civil Procedure. Notwithstanding anything to the contrary contained in this Article 13, in the event of a temporary taking of all or any portion of the Premises for a period of one hundred and eighty (180) days or less, then this Lease shall not terminate but the Base Rent and the Additional Rent shall be abated for the period of such taking in proportion to the ratio that the amount of rentable square feet of the Premises taken bears to the total rentable square feet of the Premises. Landlord shall be entitled to receive the entire award made in connection with any such temporary taking.

ARTICLE 14

ASSIGNMENT AND SUBLETTING

14.1 **Transfers**. Tenant shall not, without the prior written consent of Landlord, assign, mortgage, pledge, hypothecate, encumber, or permit any lien to attach to, or otherwise transfer, this Lease or any interest hereunder, permit any assignment, or other transfer of this Lease or any interest hereunder by operation of law, sublet the Premises or any part thereof, or enter into any license or concession agreements or otherwise permit the occupancy or use of the Premises or any part thereof by any persons other than Tenant and its employees and contractors (all of the foregoing are hereinafter sometimes referred to collectively as "**Transfers**" and any person to whom any Transfer is made or sought to be made is hereinafter sometimes referred to as a "**Transferee**"). If Tenant desires Landlord's consent to any Transfer, Tenant shall notify Landlord in writing, which notice (the "**Transfer Notice**") shall include (i) the proposed effective date of the Transfer, which shall not be less than thirty (30) days nor more than one hundred eighty (180) days after the date of delivery of the Transfer Notice, (ii) a description of the portion of the Premises to be transferred (the "**Subject Space**"), (iii) all of the terms of the proposed Transfer and the consideration therefor, including calculation of the "Transfer Premium", as that term is defined in Section 14.3 below, in connection with such Transfer, the name and address of the proposed Transferee, and a copy of all existing executed and/or proposed documentation pertaining to the proposed Transfer, including all existing operative documents to be executed to evidence such Transfer or the agreements incidental or related to such Transfer, provided that Landlord shall have the right to require Tenant to utilize Landlord's standard Transfer documents in connection with the documentation of such Transfer, (iv) current financial statements of the proposed Transferee certified by an officer, partner or owner thereof, business credit and personal references and history of the proposed Transferee and any other information reasonably required by Landlord which will enable Landlord to determine the financial responsibility, character, and reputation of the proposed Transferee, nature of such Transferee's business and proposed use of the Subject Space, and (v) an executed estoppel certificate from Tenant in the form attached hereto as **Exhibit E**. Any Transfer made without Landlord's prior written consent shall, at Landlord's option, be null, void and of no effect, and shall, at Landlord's option, constitute a default by Tenant under this Lease. Whether or not Landlord consents to any proposed Transfer, Tenant shall pay Landlord's reasonable review and processing fees, as well as any reasonable professional fees (including, without limitation, attorneys', accountants', architects', engineers' and consultants' fees) incurred by Landlord, within thirty (30) days after written request by Landlord.

14.2 **Landlord's Consent**. Landlord shall not unreasonably withhold or delay its consent to any proposed Transfer of the Subject Space to the Transferee on the terms specified in the Transfer Notice. Without limitation as to other reasonable grounds for withholding consent, the parties hereby agree that it shall be reasonable under this Lease and under any applicable law for Landlord to withhold consent to any proposed Transfer where one or more of the following apply:

14.2.1 The Transferee is of a character or reputation or engaged in a business which is not consistent with the quality of the Building or the Project;

14.2.2 The Transferee intends to use the Subject Space for purposes which are not permitted under this Lease;

14.2.3 The Transferee is either a governmental agency or instrumentality thereof;

14.2.4 The Transfer occurs during the period from the Lease Commencement Date until the earlier of (i) the fourth anniversary of the Lease Commencement Date or (ii) the date at least ninety five percent (95%) of the rentable square feet of the Project is leased, and the rent charged by Tenant to such Transferee during the term of such Transfer, calculated using a present value analysis, is less than ninety-five percent (95%) of the rent being quoted by Landlord at the time of such Transfer for comparable space in the Project for a comparable term, calculated using a present value analysis;

14.2.5 The Transferee is not a party of reasonable financial worth and/or financial stability in light of the responsibilities to be undertaken in connection with the Transfer on the date consent is requested;

14.2.6 The proposed Transfer would cause a violation of another lease for space in the Project, or would give an occupant of the Project a right to cancel its lease; or

14.2.7 Either the proposed Transferee, or any person or entity which directly or indirectly, controls, is controlled by, or is under common control with, the proposed Transferee, (i) occupies space in the Project at the time of the request for consent, or (ii) is negotiating with Landlord or has negotiated with Landlord during the six (6) month period immediately preceding the date Landlord receives the Transfer Notice, to lease space in the Project.

If Landlord consents to any Transfer pursuant to the terms of this Section 14.2 (and does not exercise any recapture rights Landlord may have under Section 14.4 of this Lease), Tenant may within six (6) months after Landlord's consent, but not later than the expiration of said six-month period, enter into such Transfer of the Premises or portion thereof, upon substantially the same terms and conditions as are set forth in the Transfer Notice furnished by Tenant to Landlord pursuant to Section 14.1 of this Lease, provided that if there are any changes in the terms and conditions from those specified in the Transfer Notice (i) such that Landlord would initially have been entitled to refuse its consent to such Transfer under this Section 14.2, or (ii) which would cause the proposed Transfer to be more favorable to the Transferee than the terms set forth in Tenant's original Transfer Notice, Tenant shall again submit the Transfer to Landlord for its approval and other action under this Article 14 (including Landlord's right of recapture, if any, under Section 14.4 of this Lease). Notwithstanding anything to the contrary in this Lease, if Tenant or any proposed Transferee claims that Landlord has unreasonably withheld or delayed its consent under Section 14.2 or otherwise has breached or acted unreasonably under this Article 14, their sole remedies shall be a suit for declaratory judgment and an injunction for the relief sought, and Tenant hereby waives the provisions of Section 1995.310 of the California Civil Code, or any successor statute, and all other remedies, including, without limitation, any right at law or equity to terminate this Lease, on its own behalf and, to the extent permitted under all applicable laws, on behalf of the proposed Transferee.

1 4 . 3 Transfer Premium. If Landlord consents to a Transfer, as a condition thereto which the parties hereby agree is reasonable, Tenant shall pay to Landlord fifty percent (50%) of any "Transfer Premium," as that term is defined in this Section 14.3, received by Tenant from such Transferee. "**Transfer Premium**" shall mean all rent, additional rent or other consideration payable by such Transferee in connection with the Transfer in excess of the Rent and Additional Rent payable by Tenant under this Lease during the term of the Transfer on a per rentable square foot basis if less than all of the Premises is transferred, after deducting the reasonable expenses incurred by Tenant for (i) any changes, alterations and improvements to the Premises in connection with the Transfer, (ii) any free base rent reasonably provided to the Transferee in connection with the Transfer (provided that such free rent shall be deducted only to the extent the same is included in the calculation of total consideration payable by such Transferee), and (iii) any brokerage commissions in connection with the Transfer and (iv) legal fees reasonably incurred in connection with the Transfer (collectively, "**Tenant's Subleasing Costs**"). "Transfer Premium" shall also include, but not be limited to, key money, bonus money or other cash consideration paid by Transferee to Tenant in connection with such Transfer, and any payment in excess of fair market value for services rendered by Tenant to Transferee or for assets, fixtures, inventory, equipment, or furniture transferred by Tenant to Transferee in connection with such Transfer. The determination of the amount of Landlord's applicable share of the Transfer Premium shall be made on a monthly basis as rent or other consideration is received by Tenant under the Transfer. For purposes of calculating the Transfer Premium on a monthly basis, Tenant's Subleasing Costs shall be deemed to be expended by Tenant in equal monthly amounts over the entire term of the Transfer.

14.4 Landlord's Options as to Subject Space. Notwithstanding anything to the contrary contained in this Article 14, in the event Tenant contemplates a Transfer which, together with all prior Transfers then remaining in effect, would cause fifty percent (50%) or more of the Premises to be Transferred, Landlord shall have the option, by giving written notice to Tenant within thirty (30) days after receipt of any Transfer Notice, to (i) recapture the Subject Space, or (ii) take an assignment or sublease of the Subject Space from Tenant. Such recapture or sublease or assignment notice, shall cancel and terminate this Lease, or create a sublease or assignment, as the case may be, with respect to the Subject Space as of the date stated in the Transfer Notice as the effective date of the proposed Transfer. In the event of a recapture by Landlord, if this Lease shall be canceled with respect to less than the entire Premises, then (A) the Rent reserved herein shall be prorated on the basis of the number of rentable square feet retained by Tenant in proportion to the number of rentable square feet contained in the Premises; (B) this Lease as so amended shall continue thereafter in full force and effect, and upon request of either party, the parties shall execute written confirmation of the same; and (C) Landlord shall construct or cause to be constructed a demising wall separating that portion of the Premises recaptured by Landlord from that portion of the Premises retained by Tenant; provided that, Tenant hereby agrees that, notwithstanding Tenant's occupancy of its retained portion of the Premises during the construction of such demising wall by Landlord, Landlord shall be permitted to construct such demising wall during normal business hours, without any obligation to pay overtime or other premiums, and the construction of such demising wall by Landlord shall in no way constitute a constructive eviction of Tenant nor entitle Tenant to any abatement of Rent, and Landlord shall have no responsibility or for any reason be liable to Tenant for any direct or indirect injury to or interference with Tenant's business arising from the construction of such demising wall, nor shall Tenant be entitled to any compensation or damages from Landlord for loss of the use of the whole or any part of its retained portion of the Premises or of Tenant's personal property or improvements resulting from the construction of such demising wall, or for any inconvenience or annoyance occasioned by the construction of such demising wall; and provided further that, Tenant shall be responsible for, and shall pay to Landlord promptly upon being billed therefor, fifty percent (50%) of all costs related to the construction of such demising wall, including Landlord's standard fee for its involvement with such demising wall. In the event Landlord elects to take an assignment or sublease of the Subject Space from Tenant, (1) such assignment or sublet shall be at a rental rate that shall be the lesser of (x) the proposed rent to be paid by Transferee upon such Transfer, or (y) the Rent then payable to Landlord pursuant to this Lease as of the effective date of such Transfer (including any scheduled escalations thereof during the term of such Transfer), pro rated for the number of rentable square feet in such Subject Space, and (2) Landlord may, at Landlord's sole cost, construct improvements in the Subject Space on the condition that, upon the termination of the term of such Transfer, Landlord shall return the Subject Space to Tenant in substantially the same condition as received by Landlord (*i.e.*, prior to the making of such improvements by Landlord), ordinary wear and tear excepted. If Landlord declines, or fails to elect in a timely manner, to recapture, sublease or take an assignment of the Subject Space under this Section 14.4, then, provided Landlord has consented to the proposed Transfer, Tenant shall be entitled to proceed to transfer the Subject Space to the proposed Transferee, subject to provisions of this Article 14.

14.5 Effect of Transfer. If Landlord consents to a Transfer, (i) the terms and conditions of this Lease shall in no way be deemed to have been waived or modified, (ii) such consent shall not be deemed consent to any further Transfer by either Tenant or a Transferee, (iii) Tenant shall deliver to Landlord, promptly after execution, an original executed copy of all documentation pertaining to the Transfer in form reasonably acceptable to Landlord, (iv) Tenant shall furnish upon Landlord's request a complete statement, certified by an independent certified public accountant, or Tenant's chief financial officer, setting forth in detail the computation of any Transfer Premium Tenant has derived and shall derive from such Transfer, and (v) no Transfer relating to this Lease or agreement entered into with respect thereto, whether with or without Landlord's consent, shall relieve Tenant or any guarantor of the Lease from any liability under this Lease, including, without limitation, in connection with the Subject Space. Landlord or its authorized representatives shall have the right at all reasonable times to audit the books, records and papers of Tenant relating to any Transfer, and shall have the right to make copies thereof. If the Transfer Premium respecting any Transfer shall be found understated, Tenant shall, within thirty (30) days after demand, pay the deficiency, and if understated by more than two percent (2%), Tenant shall pay Landlord's costs of such audit.

14.6 Additional Transfers. For purposes of this Lease, the term "**Transfer**" shall also include (i) if Tenant is a partnership or limited liability company, the withdrawal or change, voluntary, involuntary or by operation of law, of fifty percent (50%) or more of the partners or members, or transfer of fifty percent (50%) or more of partnership or membership interests, within a twelve (12)-month period, or the dissolution of the partnership or membership without immediate reconstitution thereof, and (ii) if Tenant is a closely held corporation (*i.e.*, whose stock is not publicly held and not traded through an exchange or over the counter), (A) the dissolution, merger, consolidation or other reorganization of Tenant or (B) the sale or other transfer of an aggregate of fifty percent (50%) or more of the voting shares of Tenant (other than to immediate family members by reason of gift or death), within a twelve (12)-month period, or (C) the sale, mortgage, hypothecation or pledge of an aggregate of fifty percent (50%) or more of the value of the unencumbered assets of Tenant within a twelve (12)-month period.

14.7 **Occurrence of Default**. Any Transfer hereunder shall be subordinate and subject to the provisions of this Lease, and if this Lease shall be terminated during the term of any Transfer, Landlord shall have the right to: (i) treat such Transfer as cancelled and repossess the Subject Space by any lawful means, or (ii) require that such Transferee attorn to and recognize Landlord as its landlord under any such Transfer. If Tenant shall be in default under this Lease, Landlord is hereby irrevocably authorized, as Tenant's agent and attorney-in-fact, to direct any Transferee to make all payments under or in connection with the Transfer directly to Landlord (which Landlord shall apply towards Tenant's obligations under this Lease) until such default is cured. Such Transferee shall rely on any representation by Landlord that Tenant is in default hereunder, without any need for confirmation thereof by Tenant. Upon any assignment, the assignee shall assume in writing all obligations and covenants of Tenant thereafter to be performed or observed under this Lease. No collection or acceptance of rent by Landlord from any Transferee shall be deemed a waiver of any provision of this Article 14 or the approval of any Transferee or a release of Tenant from any obligation under this Lease, whether theretofore or thereafter accruing. In no event shall Landlord's enforcement of any provision of this Lease against any Transferee be deemed a waiver of Landlord's right to enforce any term of this Lease against Tenant or any other person. If Tenant's obligations hereunder have been guaranteed, Landlord's consent to any Transfer shall not be effective unless the guarantor also consents to such Transfer.

ARTICLE 15

SURRENDER OF PREMISES; OWNERSHIP AND REMOVAL OF TRADE FIXTURES

15.1 **Surrender of Premises**. No act or thing done by Landlord or any agent or employee of Landlord during the Lease Term shall be deemed to constitute an acceptance by Landlord of a surrender of the Premises unless such intent is specifically acknowledged in writing by Landlord. The delivery of keys to the Premises to Landlord or any agent or employee of Landlord shall not constitute a surrender of the Premises or effect a termination of this Lease, whether or not the keys are thereafter retained by Landlord, and notwithstanding such delivery Tenant shall be entitled to the return of such keys at any reasonable time upon request until this Lease shall have been properly terminated. The voluntary or other surrender of this Lease by Tenant, whether accepted by Landlord or not, or a mutual termination hereof, shall not work a merger, and at the option of Landlord shall operate as an assignment to Landlord of all subleases or subtenancies affecting the Premises or terminate any or all such sublessees or subtenancies.

15.2 **Removal of Tenant Property by Tenant** . Upon the expiration of the Lease Term, or upon any earlier termination of this Lease, Tenant shall, subject to the provisions of this Article 15, quit and surrender possession of the Premises to Landlord in as good order and condition as when Tenant took possession and as thereafter improved by Landlord and/or Tenant, reasonable wear and tear and repairs which are specifically made the responsibility of Landlord hereunder excepted. Upon such expiration or termination, Tenant shall, without expense to Landlord, remove or cause to be removed from the Premises all debris and rubbish, and such items of furniture, equipment, business and trade fixtures, free-standing cabinet work, movable partitions and other articles of personal property owned by Tenant or installed or placed by Tenant at its expense in the Premises, and such similar articles of any other persons claiming under Tenant, as Landlord may, in its sole discretion, require to be removed, and Tenant shall repair at its own expense all damage to the Premises and Building resulting from such removal.

ARTICLE 16

HOLDING OVER

If Tenant holds over after the expiration of the Lease Term or earlier termination thereof, without the express or implied consent of Landlord, such tenancy shall be from month-to-month only, and shall not constitute a renewal hereof or an extension for any further term, and in such case Rent shall be payable at a monthly rate equal to one hundred fifty percent (150%) of the Rent applicable during the last rental period of the Lease Term under this Lease. Such tenancy shall be subject to every other applicable term, covenant and agreement contained herein. Nothing contained in this Article 16 shall be construed as consent by Landlord to any holding over by Tenant, and Landlord expressly reserves the right to require Tenant to surrender possession of the Premises to Landlord as provided in this Lease upon the expiration or other termination of this Lease. The provisions of this Article 16 shall not be deemed to limit or constitute a waiver of any other rights or remedies of Landlord provided herein or at law. If Tenant fails to surrender the Premises upon the termination or expiration of this Lease, in addition to any other liabilities to Landlord accruing therefrom, Tenant shall protect, defend, indemnify and hold Landlord harmless from all loss, costs (including reasonable attorneys' fees) and liability resulting from such failure, including, without limiting the generality of the foregoing, any claims made by any succeeding tenant founded upon such failure to surrender and any lost profits to Landlord resulting therefrom.

ARTICLE 17

ESTOPPEL CERTIFICATES

Within ten (10) business days following a request in writing by Landlord delivered by a nationally recognized overnight courier, Tenant shall execute, acknowledge and deliver to Landlord an estoppel certificate, which, as submitted by Landlord, shall be substantially in the form of **Exhibit E**, attached hereto (or such other form as may be required by any prospective mortgagee or purchaser of the Project, or any portion thereof), indicating therein any exceptions thereto that may exist at that time, and shall also contain any other information reasonably requested by Landlord or Landlord's mortgagee or prospective mortgagee. Any such certificate may be relied upon by any prospective mortgagee or purchaser of all or any portion of the Project. Tenant shall execute and deliver whatever other instruments may be reasonably required for such purposes. At any time during the Lease Term, Landlord may require Tenant to provide Landlord with a current financial statement and financial statements of the two (2) years prior to the current financial statement year. Such statements shall be prepared in accordance with generally accepted accounting principles and, if such is the normal practice of Tenant, shall be audited by an independent certified public accountant. Failure of Tenant to timely execute, acknowledge and deliver such estoppel certificate or other instruments shall constitute an acceptance of the Premises and an acknowledgment by Tenant that statements included in the estoppel certificate are true and correct, without exception.

ARTICLE 18

SUBORDINATION

18.1 This Lease shall be subject and subordinate to all present and future ground or underlying leases of the Building or Project (each, a "**Ground Lease**") and to any trust deed or mortgage now or hereafter in force against the Building or Project or any part thereof (each, a "**Mortgage**"), the lien and security interest imposed by such Mortgage, the rights and remedies of the holder or beneficiary of such Mortgage ("**Mortgagee**") to enforce such lien or security interest, and to all renewals, extensions, modifications, consolidations and replacements thereof, and to all advances made or hereafter to be made upon the security of such Mortgages, unless the Mortgagee or the lessor under such Ground Lease ("**Ground Lessor**") requires in writing that this Lease be superior thereto.

18.2 Tenant covenants and agrees in the event any proceedings are brought for the foreclosure of any Mortgage or deed in lieu thereof (or if any Ground Lease is terminated), to attorn, without any deductions or set-offs whatsoever, to the Mortgagee or purchaser or any successors thereto upon any such foreclosure or deed in lieu thereof (or to the Ground Lessor if any Ground Lease is terminated) (the "**Successor Landlord**"), if so requested to do so by the Successor Landlord, and to recognize the Successor Landlord as the lessor under this Lease, and this Lease shall continue in full force and effect as a direct lease between Successor Landlord and Tenant; provided, however, in no event shall Successor Landlord be liable for or bound by any of the following matters: (a) any right or alleged right of Tenant to any offset, defense, claim, counterclaim, reduction, deduction, or abatement against Tenant's payment of Rent or performance of Tenant's other obligations under this Lease (" **Offset Right**") that Tenant may have against Landlord and any other party that was landlord under this Lease at any time before the occurrence of any attornment hereunder ("**Former Landlord**") relating to any event or occurrence before the date of attornment, including any claim for damages of any kind whatsoever as the result of any breach by Former Landlord that occurred before the date of attornment; (b) any act, omission, default, misrepresentation, or breach of warranty, of any Former Landlord or obligations accruing prior to Successor Landlord's actual ownership of the Building or Project; (c) any payment of Rent that Tenant may have made to Former Landlord more than thirty (30) days before the date such Rent was first due and payable under this Lease with respect to any period after the date of attornment other than, and only to the extent that, this Lease expressly required such a prepayment; (d) any obligation (i) to pay Tenant any sum(s) that any Former Landlord owed to Tenant, or (ii) with respect to any security deposited with Former Landlord, unless such security was actually delivered to Successor Landlord;(e) any modification or amendment of this Lease, or any waiver of any terms of this Lease, made without Successor Landlord's written consent; (f) any consensual or negotiated surrender, cancellation, or termination of this Lease, in whole or in part, agreed upon between Former Landlord and Tenant, unless effected unilaterally by Tenant pursuant to the express terms of this Lease; and (g) any obligation of Landlord under this Lease to make, pay for, or reimburse Tenant for any alterations, demolition, or other improvements or work at the Building or Project, including the Premises.

18.3 Notwithstanding anything to the contrary in this Lease, before exercising any right of Tenant to cancel or terminate this Lease or to claim a partial or total eviction arising (whether under this Lease or under applicable law) from Landlord's breach or default under this Lease (a "**Termination Right**"), Tenant shall provide Mortgagee (after notification of the identity of such Mortgagee and the mailing address thereof) with notice of the breach or default by Landlord giving rise to same (the "**Default Notice**") and, thereafter, the opportunity to cure such breach or default as follows. After Mortgagee receives a Default Notice, Mortgagee shall have a period of thirty (30) days beyond the time available to Landlord under this Lease in which to cure the breach or default by Landlord. Mortgagee shall have no obligation to cure (and shall have no liability or obligation for not curing) any breach or default by Landlord, except to the extent that Mortgagee agrees or undertakes otherwise in writing. In addition, as to any breach or default by Landlord the cure of which requires possession and control of the Building or Project, provided only that Mortgagee undertakes to Tenant by written notice to Tenant within thirty (30) days after receipt of the Default Notice to exercise reasonable efforts to cure or cause to be cured by a receiver such breach or default within the period permitted by this Section, Mortgagee's cure period shall continue for such additional time as Mortgagee may reasonably require to either (a) obtain possession and control of the Building or Project and thereafter cure the breach or default with reasonable diligence and continuity, or (b) obtain the appointment of a receiver and give such receiver a reasonable period of time in which to cure the default.

18.4 Landlord's interest herein may be assigned as security at any time to any Mortgagee. Tenant shall, within ten (10) days of request by Landlord, execute such further instruments or assurances as Landlord may reasonably deem necessary to evidence or confirm the subordination or superiority of this Lease to any such Mortgages or Ground Leases. Tenant waives the provisions of any current or future statute, rule or law which may give or purport to give Tenant any right or election to terminate or otherwise adversely affect this Lease and the obligations of the Tenant hereunder in the event of any foreclosure proceeding or sale.

ARTICLE 19

DEFAULTS; REMEDIES

19.1 Events of Default. The occurrence of any of the following shall constitute a default of this Lease by Tenant:

19.1.1 Any failure by Tenant to pay any Rent or any other charge required to be paid under this Lease, or any part thereof, when due; or

19.1.2 Except where a specific time period is otherwise set forth for Tenant's performance in this Lease, in which event the failure to perform by Tenant within such time period shall be a default by Tenant under this Section 19.1.2, any failure by Tenant to observe or perform any other provision, covenant or condition of this Lease to be observed or performed by Tenant where such failure continues for thirty (30) days after written notice thereof from Landlord to Tenant; provided that if the nature of such default is such that the same cannot reasonably be cured within a thirty (30) day period, Tenant shall not be deemed to be in default if it diligently commences such cure within such period and thereafter diligently proceeds to rectify and cure such default; or

19.1.3 Abandonment or vacation of all or a substantial portion of the Premises by Tenant; or

19.1.4 The failure by Tenant to observe or perform according to the provisions of Articles 5, 14, 17 or 18 of this Lease where such failure continues for more than two (2) business days after notice from Landlord; or

19.1.5 Tenant's failure to occupy the Premises within ten (10) business days after the Lease Commencement Date.

The notice periods provided herein are in lieu of, and not in addition to, any notice periods provided by law.

19.2 Remedies Upon Default. Upon the occurrence of any event of default by Tenant, Landlord shall have, in addition to any other remedies available to Landlord at law or in equity (all of which remedies shall be distinct, separate and cumulative), the option to pursue any one or more of the following remedies, each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever.

19.2.1 Terminate this Lease, in which event Tenant shall immediately surrender the Premises to Landlord, and if Tenant fails to do so, Landlord may, without prejudice to any other remedy which it may have for possession or arrearages in rent, enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be occupying the Premises or any part thereof, without being liable for prosecution or any claim or damages therefor; and Landlord may recover from Tenant the following:

(i) The worth at the time of award of the unpaid rent which has been earned at the time of such termination; plus

(ii) The worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus

(iii) The worth at the time of award of the amount by which the unpaid rent for the balance of the Lease Term after the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus

(iv) Any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, specifically including, but not limited to, brokerage commissions and advertising expenses incurred, expenses of remodeling the Premises or any portion thereof for a new tenant, whether for the same or a different use, and any special concessions made to obtain a new tenant; and

(v) At Landlord's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by applicable law.

The term "**rent**" as used in this Section 19.2 shall be deemed to be and to mean all sums of every nature required to be paid by Tenant pursuant to the terms of this Lease, whether to Landlord or to others. As used in Sections 19.2.1(i) and (ii), above, the "worth at the time of award" shall be computed by allowing interest at the rate set forth in Article 25 of this Lease, but in no case greater than the maximum amount of such interest permitted by law. As used in Section 19.2.1(iii) above, the "worth at the time of award" shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of award plus one percent (1%).

19.2.2 Landlord shall have the remedy described in California Civil Code Section 1951.4 (lessor may continue lease in effect after lessee's breach and abandonment and recover rent as it becomes due, if lessee has the right to sublet or assign, subject only to reasonable limitations). Accordingly, if Landlord does not elect to terminate this Lease on account of any default by Tenant, Landlord may, from time to time, without terminating this Lease, enforce all of its rights and remedies under this Lease, including the right to recover all rent as it becomes due.

19.2.3 Landlord shall at all times have the rights and remedies (which shall be cumulative with each other and cumulative and in addition to those rights and remedies available under Sections 19.2.1 and 19.2.2, above, or any law or other provision of this Lease), without prior demand or notice except as required by applicable law, to seek any declaratory, injunctive or other equitable relief, and specifically enforce this Lease, or restrain or enjoin a violation or breach of any provision hereof.

19.3 Subleases of Tenant. Whether or not Landlord elects to terminate this Lease on account of any default by Tenant, as set forth in this Article 19, Landlord shall have the right to terminate any and all subleases, licenses, concessions or other consensual arrangements for possession entered into by Tenant and affecting the Premises or may, in Landlord's sole discretion, succeed to Tenant's interest in such subleases, licenses, concessions or arrangements. In the event of Landlord's election to succeed to Tenant's interest in any such subleases, licenses, concessions or arrangements, Tenant shall, as of the date of notice by Landlord of such election, have no further right to or interest in the rent or other consideration receivable thereunder.

19.4 Efforts to Relet. No re-entry or repossession, repairs, maintenance, changes, alterations and additions, reletting, appointment of a receiver to protect Landlord's interests hereunder, or any other action or omission by Landlord shall be construed as an election by Landlord to terminate this Lease or Tenant's right to possession, or to accept a surrender of the Premises, nor shall same operate to release Tenant in whole or in part from any of Tenant's obligations hereunder, unless express written notice of such intention is sent by Landlord to Tenant. Tenant hereby irrevocably waives any right otherwise available under any law to redeem or reinstate this Lease.

19.5 Landlord Default. Notwithstanding anything to the contrary set forth in this Lease and subject to the terms of Section 18.3 above, Landlord shall not be in default in the performance of any obligation required to be performed by Landlord pursuant to this Lease unless Landlord fails to perform such obligation within thirty (30) days after the receipt of notice from Tenant specifying in detail Landlord's failure to perform; provided, however, if the nature of Landlord's obligation is such that more than thirty (30) days are required for its performance, then Landlord shall not be in default under this Lease if it shall commence such performance within such thirty (30) day period and thereafter diligently pursue the same to completion. Upon any such default by Landlord under this Lease, Tenant may, except as otherwise specifically provided in this Lease to the contrary, exercise any of its rights provided at law or in equity.

ARTICLE 20

COVENANT OF QUIET ENJOYMENT

Landlord covenants that Tenant, on paying the Rent, charges for services and other payments herein reserved and on keeping, observing and performing all the other terms, covenants, conditions, provisions and agreements herein contained on the part of Tenant to be kept, observed and performed, shall, during the Lease Term, peaceably and quietly have, hold and enjoy the Premises subject to the terms, covenants, conditions, provisions and agreements hereof without interference by any persons lawfully claiming by or through Landlord. The foregoing covenant is in lieu of any other covenant express or implied.

ARTICLE 21

SECURITY DEPOSIT

21.1 In General. Concurrent with Tenant's execution of this Lease, Tenant shall deposit with Landlord a security deposit (the "**Security Deposit**") in the amount set forth in Section 8 of the Summary, as security for the faithful performance by Tenant of all of its obligations under this Lease. If Tenant defaults with respect to any provisions of this Lease, including, but not limited to, the provisions relating to the payment of Rent, the removal of property and the repair of resultant damage, Landlord may, without notice to Tenant, but shall not be required to, apply all or any part of the Security Deposit for the payment of any Rent or any other sum in default and Tenant shall, upon demand therefor, restore the Security Deposit to its original amount. Any unapplied portion of the Security Deposit shall be returned to Tenant, or, at Landlord's option, to the last assignee of Tenant's interest hereunder, within sixty (60) days following the expiration of the Lease Term. Tenant shall not be entitled to any interest on the Security Deposit and Landlord shall have the right to commingle the Security Deposit with Landlord's other funds. Tenant hereby irrevocably waives and relinquishes any and all rights, benefits, or protections, if any, Tenant now has, or in the future may have, under Section 1950.7 of the California Civil Code, any successor statute, and all other provisions of law, now or hereafter in effect, including, but not limited to, any provision of law which (i) establishes the time frame by which a landlord must refund a security deposit under a lease, or (ii) provides that a landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of rent, to repair damage caused by a tenant, or to clean the subject premises. Tenant acknowledges and agrees that that (A) any statutory time frames for the return of a security deposit are superseded by the express period identified in this Article 21, above, and (B) rather than be so limited, Landlord may claim from the Security Deposit (i) any and all sums expressly identified in this Article 21, above, and (ii) any additional sums reasonably necessary to compensate Landlord for any and all losses or damages caused by Tenant's default of this Lease, including, but not limited to, all damages or rent due upon termination of this Lease pursuant to Section 1951.2 of the California Civil Code.

21.2 **Reduction of Security Deposit**. Subject to the terms hereof, provided that as of the first day of the twenty-fifth (25th) full calendar month of the Lease Term (the "**First Determination Date**"), Tenant has not previously been in default under this Lease beyond all applicable notice and cure periods expressly set forth in this Lease and is then not in default under this Lease beyond all applicable notice and cure periods expressly set forth in this Lease, the Security Deposit shall be reduced to equal $125,333.25, and Landlord shall pay to Tenant the amount of $41,777.75 (the "**First Reduction Amount**") within thirty (30) days of the First Determination Date (and failure to pay as required shall entitle Tenant to deduct the First Reduction Amount from the Rent next due). In addition, subject to the terms hereof, provided that as of the first day of the forty-ninth (49th) full calendar month of the Lease Term (the "**Second Determination Date**"), Tenant has not previously been in default under this Lease beyond all applicable notice and cure periods expressly set forth in this Lease and is then not in default under this Lease beyond all applicable notice and cure periods expressly set forth in this Lease, the Security Deposit shall be further reduced to $83,555.50, and Landlord shall pay to Tenant the amount of $41,777.75 (the "**Second Reduction Amount**") within thirty (30) days of the Second Determination Date (and failure to pay as required shall entitle Tenant to deduct the Second Reduction Amount from the Rent next due).

ARTICLE 22

SUBSTITUTION OF PREMISES

Landlord acknowledge that Landlord has no express right pursuant to this Lease to move Tenant to other space in the Project.

ARTICLE 23

SIGNS

23.1 **Prohibited Signage and Other Items**. Any signs, notices, logos, pictures, names or advertisements which are installed and that have not been separately approved by Landlord may be removed without notice by Landlord at the sole expense of Tenant. Tenant may not install any signs on the exterior or roof of the Project or the Common Areas. Any signs, window coverings, or blinds (even if the same are located behind the Landlord-approved window coverings for the Building), or other items visible from the exterior of the Premises or Building, shall be subject to the prior approval of Landlord, in its sole discretion.

23.2 **Exterior Signage.** Tenant, at Tenant's sole cost and expense, may install Building standard Premises identification signage (i) at the entrance to the Premises, (ii) on the Building parapet, and (iii) on the monument sign facing Gleason Drive. All of such signs (collectively, the "**Tenant's Signage**") shall be subject to the prior approval of Landlord (which shall not be unreasonably withheld) and shall comply with all Applicable Laws and any recorded covenants, conditions and restrictions.

23.3 **Maintenance and Removal of Tenant Signage**. Tenant shall keep the Tenant's Signage in first-class condition and repair at all times during the Lease Term. Upon the expiration or earlier termination of this Lease or Tenant's right to exercise the Tenant's Signage right, Tenant shall, at Tenant's sole cost and expense, cause Tenant's Signage to be removed and shall cause the areas in which such Tenant's Signage was located to be restored to the condition existing immediately prior to the placement of such Tenant's Signage. If Tenant fails to timely remove such Tenant's Signage or to restore the areas in which such Tenant's Signage was located, as provided in the immediately preceding sentence, then Landlord may perform such work, and all costs incurred by Landlord in so performing (including a percentage of the cost thereof sufficient to reimburse Landlord for all overhead, general conditions, fees and other costs or expenses arising from Landlord's involvement with such repairs and/or maintenance) shall be reimbursed by Tenant to Landlord within thirty (30) days after Tenant's receipt of an invoice therefor together with reasonable supporting evidence. The terms of this Section 23.3 shall survive the expiration or earlier termination of this Lease.

ARTICLE 24

COMPLIANCE WITH LAW

Tenant shall not do anything or suffer anything to be done in or about the Premises or the Project which will in any way conflict with any law, statute, ordinance or other governmental rule, regulation or requirement now in force or which may hereafter be enacted or promulgated, including, without limitation, any such governmental regulations related to Hazardous Materials Laws (as defined in Section 29.34 below). At its sole cost and expense, Tenant shall promptly comply with such governmental measures. Should any standard or regulation now or hereafter be imposed on Landlord or Tenant by a state, federal or local governmental body charged with the establishment, regulation and enforcement of occupational, health or safety standards for employers, employees, landlords or tenants, then Tenant agrees, at its sole cost and expense, to comply promptly with such standards or regulations and to cooperate with Landlord, including, without limitation, by taking such actions as Landlord may reasonably require, in Landlord's efforts to comply with such standards or regulations. Tenant shall be responsible, at its sole cost and expense, to make all alterations to the Premises as are required to comply with the governmental rules, regulations, requirements or standards described in this Article 24. The judgment of any court of competent jurisdiction or the admission of Tenant in any judicial action, regardless of whether Landlord is a party thereto, that Tenant has violated any of said governmental measures, shall be conclusive of that fact as between Landlord and Tenant. Tenant shall promptly pay all fines, penalties and damages that may arise out of or be imposed because of its failure to comply with the provisions of this Article 24.

ARTICLE 25

LATE CHARGES

If any installment of Rent or any other sum due from Tenant shall not be received by Landlord or Landlord's designee within five (5) business days after Tenant's receipt of written notice from Landlord that said amount is due, then Tenant shall pay to Landlord a late charge equal to five percent (5%) of the overdue amount plus any reasonable attorneys' fees incurred by Landlord by reason of Tenant's failure to pay Rent and/or other charges when due hereunder. The late charge shall be deemed Additional Rent and the right to require it shall be in addition to all of Landlord's other rights and remedies hereunder or at law and shall not be construed as liquidated damages or as limiting Landlord's remedies in any manner. In addition to the late charge described above, any Rent or other amounts owing hereunder which are not paid within ten (10) days after the date they are due shall bear interest from the date when due until paid at a rate per annum (the "**Default Rate**") equal to the lesser of (i) the annual "Bank Prime Loan" rate cited in the Federal Reserve Statistical Release Publication H.15(519), published on the first Tuesday of each calendar month (or such other comparable index as Landlord and Tenant shall reasonably agree upon if such rate ceases to be published) plus four (4) percentage points, and (ii) the highest rate permitted by applicable law.

ARTICLE 26

LANDLORD'S RIGHT TO CURE DEFAULT; PAYMENTS BY TENANT

26.1 **Landlord's Cure**. All covenants and agreements to be kept or performed by Tenant under this Lease shall be performed by Tenant at Tenant's sole cost and expense and without any reduction of Rent, except to the extent, if any, otherwise expressly provided herein. If Tenant shall fail to perform any obligation under this Lease, and such failure shall continue in excess of the time allowed under Section 19.1.2, above, unless a specific time period is otherwise stated in this Lease, Landlord may, but shall not be obligated to, make any such payment or perform any such act on Tenant's part without waiving its rights based upon any default of Tenant and without releasing Tenant from any obligations hereunder.

26.2 Tenant's Reimbursement. Except as may be specifically provided to the contrary in this Lease, Tenant shall pay to Landlord, upon delivery by Landlord to Tenant of statements therefor: (i) sums equal to expenditures reasonably made and obligations incurred by Landlord in connection with the remedying by Landlord of Tenant's defaults pursuant to the provisions of Section 26.1; (ii) sums equal to all losses, costs, liabilities, damages and expenses referred to in Article 10 of this Lease; and (iii) sums equal to all expenditures made and obligations incurred by Landlord in collecting or attempting to collect the Rent or in enforcing or attempting to enforce any rights of Landlord under this Lease or pursuant to law, including, without limitation, all reasonable legal fees and other amounts so expended. Tenant's obligations under this Section 26.2 shall survive the expiration or sooner termination of the Lease Term.

ARTICLE 27

ENTRY BY LANDLORD

Landlord reserves the right at all reasonable times and upon reasonable notice to Tenant (except in the case of an emergency) to enter the Premises to (i) inspect them; (ii) show the Premises to prospective purchasers, or to current or prospective mortgagees, ground or underlying lessors or insurers or, during the last twelve (12) months of the Lease Term, to prospective tenants; (iii) post notices of nonresponsibility; or (iv) alter, improve or repair the Premises or the Building, or for structural alterations, repairs or improvements to the Building or the Building's systems and equipment. Notwithstanding anything to the contrary contained in this Article 27, Landlord may enter the Premises at any time to (A) perform services required of Landlord, including janitorial service; (B) take possession due to any breach of this Lease in the manner provided herein; and (C) perform any covenants of Tenant which Tenant fails to perform. Landlord may make any such entries without the abatement of Rent, except as otherwise provided in this Lease, and may take such reasonable steps as required to accomplish the stated purposes. Tenant hereby waives any claims for damages or for any injuries or inconvenience to or interference with Tenant's business, lost profits, any loss of occupancy or quiet enjoyment of the Premises, and any other loss occasioned thereby. For each of the above purposes, Landlord shall at all times have a key with which to unlock all the doors in the Premises, excluding Tenant's vaults, safes and special security areas designated in advance by Tenant. In an emergency, Landlord shall have the right to use any means that Landlord may deem proper to open the doors in and to the Premises. Any entry into the Premises by Landlord in the manner hereinbefore described shall not be deemed to be a forcible or unlawful entry into, or a detainer of, the Premises, or an actual or constructive eviction of Tenant from any portion of the Premises. No provision of this Lease shall be construed as obligating Landlord to perform any repairs, alterations or decorations except as otherwise expressly agreed to be performed by Landlord herein.

ARTICLE 28

TENANT PARKING

Tenant shall have the right to use, without charge, commencing on the Lease Commencement Date, the amount of parking passes set forth in Section 9 of the Summary, on a monthly basis throughout the Lease Term and any Option Term, which parking passes shall pertain to the Project parking facility. Tenant shall be responsible for the full amount of any taxes imposed by any governmental authority in connection with the renting of such parking passes by Tenant or the use of the parking facility by Tenant. Tenant's continued right to use the parking passes is conditioned upon Tenant abiding by all rules and regulations which are prescribed from time to time for the orderly operation and use of the parking facility where the parking passes are located (including any sticker or other identification system established by Landlord and the prohibition of vehicle repair and maintenance activities in the Project's parking facilities), Tenant's cooperation in seeing that Tenant's employees and visitors also comply with such rules and regulations and Tenant not being in default under this Lease. Tenant's use of the Project parking facility shall be at Tenant's sole risk and Tenant acknowledges and agrees that Landlord shall have no liability whatsoever for damage to the vehicles of Tenant, its employees and/or visitors, or for other personal injury or property damage or theft relating to or connected with the parking rights granted herein or any of Tenant's, its employees' and/or visitors' use of the parking facilities. Landlord specifically reserves the right to change the size, configuration, design, layout and all other aspects of the Project parking facility at any time and Tenant acknowledges and agrees that Landlord may, without incurring any liability to Tenant and without any abatement of Rent under this Lease, from time to time, close-off or restrict access to the Project parking facility for purposes of permitting or facilitating any such construction, alteration or improvements. Landlord may delegate its responsibilities hereunder to a parking operator in which case such parking operator shall have all the rights of control attributed hereby to the Landlord. Landlord and/or such parking operator may institute a valet and/or a valet assist program at any time. The parking passes rented by Tenant pursuant to this Article 28 are provided to Tenant solely for use by Tenant's own personnel and such passes may not be transferred, assigned, subleased or otherwise alienated by Tenant without Landlord's prior approval. Tenant may validate visitor parking by such method or methods as the Landlord may establish, at the validation rate from time to time generally applicable to visitor parking.

ARTICLE 29

MISCELLANEOUS PROVISIONS

29.1 Terms; Captions. The words "Landlord" and "Tenant" as used herein shall include the plural as well as the singular. The necessary grammatical changes required to make the provisions hereof apply either to corporations or partnerships or individuals, men or women, as the case may require, shall in all cases be assumed as though in each case fully expressed. The captions of Articles and Sections are for convenience only and shall not be deemed to limit, construe, affect or alter the meaning of such Articles and Sections.

29.2 Binding Effect. Subject to all other provisions of this Lease, each of the covenants, conditions and provisions of this Lease shall extend to and shall, as the case may require, bind or inure to the benefit not only of Landlord and of Tenant, but also of their respective heirs, personal representatives, successors or assigns, provided this clause shall not permit any assignment by Tenant contrary to the provisions of Article 14 of this Lease.

29.3 No Air Rights. No rights to any view or to light or air over any property, whether belonging to Landlord or any other person, are granted to Tenant by this Lease. If at any time any windows of the Premises are temporarily darkened or the light or view therefrom is obstructed by reason of any repairs, improvements, maintenance or cleaning in or about the Project, the same shall be without liability to Landlord and without any reduction or diminution of Tenant's obligations under this Lease.

29.4 Modification of Lease. Should any current or prospective mortgagee or ground lessor for the Building or Project require a modification of this Lease, which modification will not cause an increased cost or expense to Tenant or in any other way materially and adversely change the rights and obligations of Tenant hereunder, then and in such event, Tenant agrees that this Lease may be so modified and agrees to execute whatever documents are reasonably required therefor and to deliver the same to Landlord within ten (10) business days following a request therefor. At the request of Landlord or any mortgagee or ground lessor, Tenant agrees to execute a short form of Lease and deliver the same to Landlord within ten (10) business days following the request therefor.

29.5 Transfer of Landlord's Interest. Tenant acknowledges that Landlord has the right to transfer all or any portion of its interest in the Project or Building and in this Lease, and Tenant agrees that in the event of any such transfer, Landlord shall automatically be released from all liability under this Lease and Tenant agrees to look solely to such transferee for the performance of Landlord's obligations hereunder after the date of transfer and such transferee shall be deemed to have fully assumed and be liable for all obligations of this Lease to be performed by Landlord, including the return of any Security Deposit, and Tenant shall attorn to such transferee.

29.6 Prohibition Against Recording. Except as provided in Section 29.4 of this Lease, neither this Lease, nor any memorandum, affidavit or other writing with respect thereto, shall be recorded by Tenant or by anyone acting through, under or on behalf of Tenant.

29.7 Landlord's Title. Landlord's title is and always shall be paramount to the title of Tenant. Nothing herein contained shall empower Tenant to do any act which can, shall or may encumber the title of Landlord.

29.8 **Relationship of Parties**. Nothing contained in this Lease shall be deemed or construed by the parties hereto or by any third party to create the relationship of principal and agent, partnership, joint venturer or any association between Landlord and Tenant.

29.9 **Application of Payments**. Landlord shall have the right to apply payments received from Tenant pursuant to this Lease, regardless of Tenant's designation of such payments, to satisfy any obligations of Tenant hereunder, in such order and amounts as Landlord, in its sole discretion, may elect.

29.10 **Time of Essence**. Time is of the essence with respect to the performance of every provision of this Lease in which time of performance is a factor.

29.11 **Partial Invalidity**. If any term, provision or condition contained in this Lease shall, to any extent, be invalid or unenforceable, the remainder of this Lease, or the application of such term, provision or condition to persons or circumstances other than those with respect to which it is invalid or unenforceable, shall not be affected thereby, and each and every other term, provision and condition of this Lease shall be valid and enforceable to the fullest extent possible permitted by law.

29.12 **No Warranty**. In executing and delivering this Lease, Tenant has not relied on any representations, including, but not limited to, any representation as to the amount of any item comprising Additional Rent or the amount of the Additional Rent in the aggregate or that Landlord is furnishing the same services to other tenants, at all, on the same level or on the same basis, or any warranty or any statement of Landlord which is not set forth herein or in one or more of the exhibits attached hereto.

29.13 **Landlord Exculpation**. The liability of Landlord or the Landlord Parties to Tenant for any default by Landlord under this Lease or arising in connection herewith or with Landlord's operation, management, leasing, repair, renovation, alteration or any other matter relating to the Project or the Premises shall be limited solely and exclusively to an amount which is equal to the lesser of (a) the interest of Landlord in the Building or (b) the equity interest Landlord would have in the Building if the Building were encumbered by third-party debt in an amount equal to eighty percent (80%) of the value of the Building (as such value is determined by Landlord), provided that in no event shall such liability extend to any sales or insurance proceeds received by Landlord or the Landlord Parties in connection with the Project, Building or Premises. Neither Landlord, nor any of the Landlord Parties shall have any personal liability therefor, and Tenant hereby expressly waives and releases such personal liability on behalf of itself and all persons claiming by, through or under Tenant. The limitations of liability contained in this Section 29.13 shall inure to the benefit of Landlord's and the Landlord Parties' present and future partners, beneficiaries, officers, directors, trustees, shareholders, agents and employees, and their respective partners, heirs, successors and assigns. Under no circumstances shall any present or future partner of Landlord (if Landlord is a partnership), or trustee or beneficiary (if Landlord or any partner of Landlord is a trust), have any liability for the performance of Landlord's obligations under this Lease. Notwithstanding any contrary provision herein, neither Landlord nor the Landlord Parties shall be liable under any circumstances for injury or damage to, or interference with, Tenant's business, including but not limited to, loss of profits, loss of rents or other revenues, loss of business opportunity, loss of goodwill or loss of use, in each case, however occurring.

29.14 **Entire Agreement**. It is understood and acknowledged that there are no oral agreements between the parties hereto affecting this Lease and this Lease constitutes the parties' entire agreement with respect to the leasing of the Premises and supersedes and cancels any and all previous negotiations, arrangements, brochures, agreements and understandings, if any, between the parties hereto or displayed by Landlord to Tenant with respect to the subject matter thereof, and none thereof shall be used to interpret or construe this Lease. None of the terms, covenants, conditions or provisions of this Lease can be modified, deleted or added to except in writing signed by the parties hereto.

29.15 **Right to Lease**. Landlord reserves the absolute right to effect such other tenancies in the Project as Landlord in the exercise of its sole business judgment shall determine to best promote the interests of the Building or Project. Tenant does not rely on the fact, nor does Landlord represent, that any specific tenant or type or number of tenants shall, during the Lease Term, occupy any space in the Building or Project.

29.16 **Force Majeure**. Any prevention, delay or stoppage due to strikes, lockouts, labor disputes, acts of God, acts of war, terrorist acts, inability to obtain services, labor, or materials or reasonable substitutes therefor, governmental actions, civil commotions, fire or other casualty, and other causes beyond the reasonable control of the party obligated to perform, except with respect to the obligations imposed with regard to Rent and other charges to be paid by Tenant pursuant to this Lease (collectively, a "**Force Majeure**"), notwithstanding anything to the contrary contained in this Lease, shall excuse the performance of such party for a period equal to any such prevention, delay or stoppage and, therefore, if this Lease specifies a time period for performance of an obligation of either party, that time period shall be extended by the period of any delay in such party's performance caused by a Force Majeure.

29.17 **Waiver of Redemption by Tenant** . Tenant hereby waives, for Tenant and for all those claiming under Tenant, any and all rights now or hereafter existing to redeem by order or judgment of any court or by any legal process or writ, Tenant's right of occupancy of the Premises after any termination of this Lease.

29.18 **Notices**. All notices, demands, statements, designations, approvals or other communications (collectively, "**Notices**") given or required to be given by either party to the other hereunder or by law shall be in writing, shall be (A) sent by United States certified or registered mail, postage prepaid, return receipt requested ("**Mail**"), (B) delivered by a nationally recognized overnight courier, or (C) delivered personally. Any Notice shall be sent, transmitted, or delivered, as the case may be, to Tenant at the appropriate address set forth in Section 10 of the Summary, or to such other place as Tenant may from time to time designate in a Notice to Landlord, or to Landlord at the addresses set forth below, or to such other places as Landlord may from time to time designate in a Notice to Tenant. Any Notice will be deemed given (i) three (3) days after the date it is posted if sent by Mail, (ii) the date the overnight courier delivery is made, or (iii) the date personal delivery is made. As of the date of this Lease, any Notices to Landlord must be sent, transmitted, or delivered, as the case may be, to the following addresses:

SFII Creekside, LLC
260 California Street, Suite 300
San Francisco, California 94111
Attn: Craig Firpo

with a copy to:

Allen Matkins Leck Gamble Mallory & Natsis LLP
1901 Avenue of the Stars, Suite 1800
Los Angeles, California 90067
Attention: Anton N. Natsis, Esq.

29.19 **Joint and Several**. If there is more than one Tenant, the obligations imposed upon Tenant under this Lease shall be joint and several. In the event that the Tenant is a married individual, the terms, covenants and conditions of this Lease shall be binding upon the marital community of which the Tenant is a member.

29.20 **Authority**. If Tenant is a corporation, trust, partnership or limited liability company, each individual executing this Lease on behalf of Tenant hereby represents and warrants that Tenant is a duly formed and existing entity qualified to do business in the State of California and that Tenant has full right and authority to execute and deliver this Lease and that each person signing on behalf of Tenant is authorized to do so. In such event, Tenant shall, within ten (10) days after execution of this Lease, deliver to Landlord satisfactory evidence of such authority and, if an entity, upon demand by Landlord, also deliver to Landlord satisfactory evidence of (i) good standing in Tenant's state of formation and (ii) qualification to do business in the State of California.

29.21 **Attorneys' Fees**. In the event that either Landlord or Tenant should bring suit for the possession of the Premises, for the recovery of any sum due under this Lease, or because of the breach of any provision of this Lease or for any other relief against the other, then all costs and expenses, including reasonable attorneys' fees, incurred by the prevailing party therein shall be paid by the other party, which obligation on the part of the other party shall be deemed to have accrued on the date of the commencement of such action and shall be enforceable whether or not the action is prosecuted to judgment.

29.22 **Governing Law; WAIVER OF TRIAL BY JURY** . This Lease shall be construed and enforced in accordance with the laws of the State of California. IN ANY ACTION OR PROCEEDING ARISING HEREFROM, LANDLORD AND TENANT HEREBY CONSENT TO (I) THE JURISDICTION OF ANY COMPETENT COURT WITHIN THE STATE OF CALIFORNIA, (II) SERVICE OF PROCESS BY ANY MEANS AUTHORIZED BY CALIFORNIA LAW, AND (III) TO THE EXTENT PERMITTED BY APPLICABLE LAW, IN THE INTEREST OF SAVING TIME AND EXPENSE, TRIAL WITHOUT A JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY EITHER OF THE PARTIES HERETO AGAINST THE OTHER OR THEIR SUCCESSORS IN RESPECT OF ANY MATTER ARISING OUT OF OR IN CONNECTION WITH THIS LEASE, THE RELATIONSHIP OF LANDLORD AND TENANT, TENANT'S USE OR OCCUPANCY OF THE PREMISES, AND/OR ANY CLAIM FOR INJURY OR DAMAGE, OR ANY EMERGENCY OR STATUTORY REMEDY. IN THE EVENT LANDLORD COMMENCES ANY SUMMARY PROCEEDINGS OR ACTION FOR NONPAYMENT OF BASE RENT OR ADDITIONAL RENT, TENANT SHALL NOT INTERPOSE ANY COUNTERCLAIM OF ANY NATURE OR DESCRIPTION (UNLESS SUCH COUNTERCLAIM SHALL BE MANDATORY) IN ANY SUCH PROCEEDING OR ACTION, BUT SHALL BE RELEGATED TO AN INDEPENDENT ACTION AT LAW.

29.23 **Submission of Lease**. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of, option for or option to lease, and it is not effective as a lease or otherwise until execution and delivery by both Landlord and Tenant.

29.24 **Brokers**. Landlord and Tenant hereby warrant to each other that they have had no dealings with any real estate broker or agent in connection with the negotiation of this Lease, excepting only the real estate brokers or agents specified in Section 12 of the Summary (the "**Brokers**"), and that they know of no other real estate broker or agent who is entitled to a commission in connection with this Lease. Each party agrees to indemnify and defend the other party against and hold the other party harmless from any and all claims, demands, losses, liabilities, lawsuits, judgments, costs and expenses (including without limitation reasonable attorneys' fees) with respect to any leasing commission or equivalent compensation alleged to be owing on account of any dealings with any real estate broker or agent, other than the Brokers, occurring by, through, or under the indemnifying party. The terms of this Section 29.24 shall survive the expiration or earlier termination of the Lease Term.

29.25 **Independent Covenants**. This Lease shall be construed as though the covenants herein between Landlord and Tenant are independent and not dependent and Tenant hereby expressly waives the benefit of any statute to the contrary and agrees that if Landlord fails to perform its obligations set forth herein, Tenant shall not be entitled to make any repairs or perform any acts hereunder at Landlord's expense or to any setoff of the Rent or other amounts owing hereunder against Landlord.

29.26 **Project or Building Name, Address and Signage**. Landlord shall have the right at any time to change the name and/or address of the Project or Building and to install, affix and maintain any and all signs on the exterior and on the interior of the Project or Building as Landlord may, in Landlord's sole discretion, desire. Tenant shall not use the name of the Project or Building or use pictures or illustrations of the Project or Building in advertising or other publicity or for any purpose other than as the address of the business to be conducted by Tenant in the Premises, without the prior written consent of Landlord.

29.27 **Counterparts**. This Lease may be executed in counterparts with the same effect as if both parties hereto had executed the same document. Both counterparts shall be construed together and shall constitute a single lease.

29.28 **Confidentiality**. Tenant acknowledges that the content of this Lease and any related documents are confidential information. Tenant shall keep such confidential information strictly confidential and shall not disclose such confidential information to any person or entity other than Tenant's financial, legal, and space planning consultants.

29.29 **Building Renovations**. It is specifically understood and agreed that Landlord has no obligation and has made no promises to alter, remodel, improve, renovate, repair or decorate the Premises, Building, or any part thereof and that no representations respecting the condition of the Premises or the Building have been made by Landlord to Tenant except as specifically set forth herein or in the Tenant Work Letter. However, Tenant hereby acknowledges that Landlord is currently renovating or may during the Lease Term renovate, improve, alter, or modify (collectively, the "**Renovations**") the Project, the Building and/or the Premises. Tenant hereby agrees that such Renovations shall in no way constitute a constructive eviction of Tenant nor entitle Tenant to any abatement of Rent. Landlord shall have no responsibility and shall not be liable to Tenant for any injury to or interference with Tenant's business arising from the Renovations, nor shall Tenant be entitled to any compensation or damages from Landlord for loss of the use of the whole or any part of the Premises or of Tenant's personal property or improvements resulting from the Renovations, or for any inconvenience or annoyance occasioned by such Renovations.

29.30 **No Violation**. Tenant hereby warrants and represents that neither its execution of nor performance under this Lease shall cause Tenant to be in violation of any agreement, instrument, contract, law, rule or regulation by which Tenant is bound, and Tenant shall protect, defend, indemnify and hold Landlord harmless against any claims, demands, losses, damages, liabilities, costs and expenses, including, without limitation, reasonable attorneys' fees and costs, arising from Tenant's breach of this warranty and representation.

29.31 **Communications and Computer Lines**. Tenant may install, maintain, replace, remove or use any communications or computer wires and cables serving the Premises (collectively, the "**Lines**"), provided that (i) Tenant shall obtain Landlord's prior written consent, use an experienced and qualified contractor approved in writing by Landlord, and comply with all of the other provisions of Articles 7 and 8 of this Lease, (ii) any new or existing Lines servicing the Premises shall comply with all applicable governmental laws and regulations, (iii) as a condition to permitting the installation of new Lines, Landlord may require that Tenant remove existing Lines located in or serving the Premises and repair any damage in connection with such removal, and (iv) Tenant shall pay all costs in connection therewith. All Lines shall be clearly marked with adhesive plastic labels (or plastic tags attached to such Lines with wire) to show Tenant's name, suite number, telephone number and the name of the person to contact in the case of an emergency (A) every four feet (4') outside the Premises (specifically including, but not limited to, the electrical room risers and other Common Areas), and (B) at the Lines' termination point(s) (collectively, the "**Identification Requirements**"). Landlord reserves the right, upon notice to Tenant prior to the expiration or earlier termination of this Lease, to require that Tenant, at Tenant's sole cost and expense, remove any Lines located in or serving the Premises prior to the expiration or earlier termination of this Lease.

29.32 **Development of the Project**.

29.32.1 **Subdivision**. Landlord reserves the right to further subdivide all or a portion of the Project. Tenant agrees to execute and deliver, upon demand by Landlord and in the form requested by Landlord, any additional documents needed to conform this Lease to the circumstances resulting from such subdivision.

29.32.2 **The Other Improvements**. If portions of the Project or property adjacent to the Project (collectively, the "**Other Improvements**") are owned by an entity other than Landlord, Landlord, at its option, may enter into an agreement with the owner or owners of any or all of the Other Improvements to provide (i) for reciprocal rights of access and/or use of the Project and the Other Improvements, (ii) for the common management, operation, maintenance, improvement and/or repair of all or any portion of the Project and the Other Improvements, provided that Tenant's rights under this Lease are not materially impaired, (iii) for the allocation of a portion of the Direct Expenses to the Other Improvements and the operating expenses and taxes for the Other Improvements to the Project, and (iv) for the use or improvement of the Other Improvements and/or the Project in connection with the improvement, construction, and/or excavation of the Other Improvements and/or the Project. Nothing contained herein shall be deemed or construed to limit or otherwise affect Landlord's right to convey all or any portion of the Project or any other of Landlord's rights described in this Lease.

29.32.3 **Construction of Project and Other Improvements**. Tenant acknowledges that portions of the Project and/or the Other Improvements may be subject to demolition or construction following Tenant's occupancy of the Premises, and that such construction may result in levels of noise, dust, obstruction of access, etc. which are in excess of that present in a fully constructed project. Tenant hereby waives any and all rent offsets or claims of constructive eviction which may arise in connection with such demolition or construction.

29.33 **Transportation Management**. Tenant shall fully comply with all present or future programs intended to manage parking, transportation or traffic in and around the Project and/or the Building, and in connection therewith, Tenant shall take responsible action for the transportation planning and management of all employees located at the Premises by working directly with Landlord, any governmental transportation management organization or any other transportation-related committees or entities. Such programs may include, without limitation: (i) restrictions on the number of peak-hour vehicle trips generated by Tenant; (ii) increased vehicle occupancy; (iii) implementation of an in-house ridesharing program and an employee transportation coordinator; (iv) working with employees and any Project, Building or area-wide ridesharing program manager; (v) instituting employer-sponsored incentives (financial or in-kind) to encourage employees to rideshare; and (vi) utilizing flexible work shifts for employees.

29.34 Hazardous Materials. Landlord and Tenant agree as follows with respect to the existence or use of "Hazardous Materials," as that term is defined in Section 29.34.4, below, on the Project.

29.34.1 Hazardous Materials Disclosure Certificate. Upon request by Landlord from time to time, Tenant shall deliver to Landlord an executed Hazardous Materials disclosure statement, substantially in the form reasonably required by Landlord from time to time describing Tenant's then-present use of Hazardous Materials on the Premises, and shall also deliver any other reasonably necessary documents as requested by Landlord. Tenant shall concurrently file with Landlord a copy of any business response plan or inventory required to be maintained and/or filed with any federal, state or local regulatory agency under any applicable Laws. Landlord and Tenant acknowledge and agree that, as of the date of this Lease, Tenant has fully and accurately completed Landlord's pre-leasing environmental exposures questionnaire (the "**Environmental Questionnaire**" and the Hazardous Materials set forth therein, the "**Approved Hazardous Materials**"), as set forth on **Exhibit F** attached hereto (the "**Approved Hazardous Materials Exhibit**").

29.34.2 Hazardous Materials Usage. Neither Tenant, nor Tenant's employees, contractors and subcontractors of any tier, entities with a contractual relationship with Tenant (other than Landlord), or any entity acting as an agent or sub-agent of Tenant, shall be entitled to produce, use, store, generate, transport or dispose of any Hazardous Materials on, in, or about any portion of the Premises, Building or the Project, nor cause or permit any Hazardous Materials to be brought upon, placed, stored, manufactured, generated, blended, handled, recycled, used or released on, in, under or about the Premises (herein referred to as "**Hazardous Materials Usage**") which were not specifically listed on the Approved Hazardous Materials Exhibit, without, in each instance, obtaining Landlord's prior written consent thereto, which consent shall not be unreasonably withheld, conditioned or delayed; provided, however, that in the event Tenant desires to use, store or dispose of Hazardous Materials which are not similar to the Hazardous Materials specifically listed on the Approved Hazardous Materials Exhibit in terms of their hazardous character, handling profile, usage and quantity ("**New Hazardous Materials Usage**"), then Landlord shall have the right to impose additional terms and conditions on this Lease based upon such the hazardous character, handling profile, use, storage and/or disposal of such New Hazardous Materials Usage, to the extent such additional terms and conditions are consistent with the requirements of landlords of comparable projects in the vicinity of the Project when leasing space to tenants using Hazardous Materials materially similar to the New Hazardous Materials Usage in terms of hazardous character, handling profile, usage and quantity. Tenant shall not be entitled nor permitted to install any tanks under, on or about the Premises, Building or Project for the storage of Hazardous Materials without the express written consent of Landlord, which may be given or withheld in Landlord's sole and absolute discretion. If any information provided to Landlord by Tenant on the Approved Hazardous Materials Exhibit, or otherwise relating to information concerning Hazardous Materials is false, incomplete, or misleading in any material respect, the same shall be deemed a default by Tenant under this Lease. Any Hazardous Materials Usage by Tenant and Tenant's Agents after the date of this Lease on or about the Project shall strictly comply with all applicable laws, including all Hazardous Materials Laws (as defined in Section 29.34.4, below) now or hereinafter enacted. Such foregoing obligation shall include, without limitation, maintaining, and complying with, all required necessary licenses, certifications, permits and approvals appropriate or required for any Hazardous Materials Usage by Tenant on the Premises. Landlord shall have a continuing right, without obligation, to require Tenant to obtain, and to review and inspect any and all such permits, licenses, certifications and approvals, together with copies of any and all Hazardous Materials management plans and programs, any and all Hazardous Materials risk management and pollution prevention programs, and any and all Hazardous Materials emergency response and employee training programs respecting Tenant's Hazardous Materials Usage. Upon request of Landlord, Tenant shall deliver to Landlord a narrative description explaining the nature and scope of Tenant's activities involving Hazardous Materials and demonstrating to Landlord's satisfaction Tenant's compliance with all Hazardous Materials Laws and the terms of this Lease.

29.34.3 Indemnity. Tenant shall indemnify, hold harmless, and, at Landlord's option (with such attorneys as Landlord may approve in advance and in writing), defend Landlord and Landlord's officers, directors, shareholders, partners, members, managers, employees, contractors, property managers, agents and mortgagees ("**Landlord Parties**") and other lien holders, from and against any and all Losses (as hereinafter defined) arising from or related to: (a) any violation or alleged violation by Tenant or any of Tenant's Agents of any of the Laws, including, without limitation, the Hazardous Materials Laws; (b) any breach of the provisions of this Section 29.34 or any subsection thereof by Tenant or any of Tenant's Agents; (c) any Hazardous Materials Usage on, about or from the Premises, the Project or Common Areas of any Hazardous Materials approved by Landlord under this Lease, or (d) Landlord's exercise of its cure rights in Article 26, below. The term "**Losses**" shall mean all claims, demands, expenses, actions, judgments, damages, penalties, fines, liabilities, losses of every kind and nature (including, without limitation, property damage, diminution in value of Landlord's interest in the Premises or the Project, damages for the loss or restriction on use of any space or amenity within the Building or the Project, damages arising from any adverse impact on marketing space in the Project, sums paid in settlement of claims and any costs and expenses associated with injury, illness or death to or of any person), suits, administrative proceedings, costs and fees, including, but not limited to, attorneys' and consultants' fees and expenses, and the costs of cleanup, remediation, removal and restoration.

29.34.4 Hazardous Materials. As used herein, the term "**Hazardous Materials**" means any hazardous, radioactive or toxic substance, material or waste which is or becomes regulated by any local governmental authority, the State of California or the United States Government or under any Hazardous Material Laws. The term "**Hazardous Materials**," includes, without limitation, hazardous radioactive material, radioactive material, mixed waste, petroleum products, asbestos, PCB's, and any material or substance which is (i) listed under Article 9, or defined as hazardous or extremely hazardous pursuant to Article 11 of Title 22, of the California Code of Regulations, Division 4, Chapter 20, (ii) defined as a "hazardous waste" pursuant to Section 1004 of the federal Resource Conservation and Recovery Act, 42 U.S.C. 6901 et seq. (42 U.S.C. 6903), (iii) defined as a "hazardous substance" pursuant to Section 101 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9601 et seq. (42 U.S.C. 9601) or (iv) regulated as a radioactive material under Title 17, Division 1, Chapter 5, Subchapter 4 of the California Code or Regulations and Title 10, Code of Federal Regulations, part 20. As used herein, the term "**Hazardous Material Laws**" shall mean any statute, law, ordinance, or regulation of any governmental body or agency (including the U.S. Environmental Protection Agency, the California Regional Water Quality Control Board, the California Department of Public Health Radiologic Health Branch and the California Department of Toxic Substances Control) which regulates the use, storage, release or disposal of any Hazardous Material.

29.34.5 Survival. The obligations of Tenant under this Section 29.34 shall survive the expiration or earlier termination of this Lease, and shall remain effective until all of Tenant's obligations under this Section 29.34 have been completely performed and satisfied. The rights and obligations of Landlord and Tenant with respect to issues relating to Hazardous Materials are exclusively established by this Section 29.34. In the event of any inconsistency between any other part of this Lease and Section 29.34, the terms of this Section 29.34 shall control.

[Remainder of page intentionally left blank; signature pages to follow]

IN WITNESS WHEREOF, Landlord and Tenant have caused this Lease to be executed the day and date first above written.

LANDLORD:

SFII CREEKSIDE, LLC,
a Delaware limited liability company

By: Swift Real Estate Partners Fund II REIT II, LLC,
a Delaware limited liability company,
its manager

By: Swift Real Estate Partners Fund II, L.P.,
a Delaware limited partnership,
its manager
By:Swift Fund II GP, LLC,
a Delaware limited liability company,
its general partner

By: _____
Name: _____
Its: _____

TENANT:

GIGA-TRONICS INCORPORATED,
a California corporation

By: _____

Its: _____

By: _____

Its: _____

EXHIBIT A

CREEKSIDE BUSINESS PARK

OUTLINE OF PREMISES

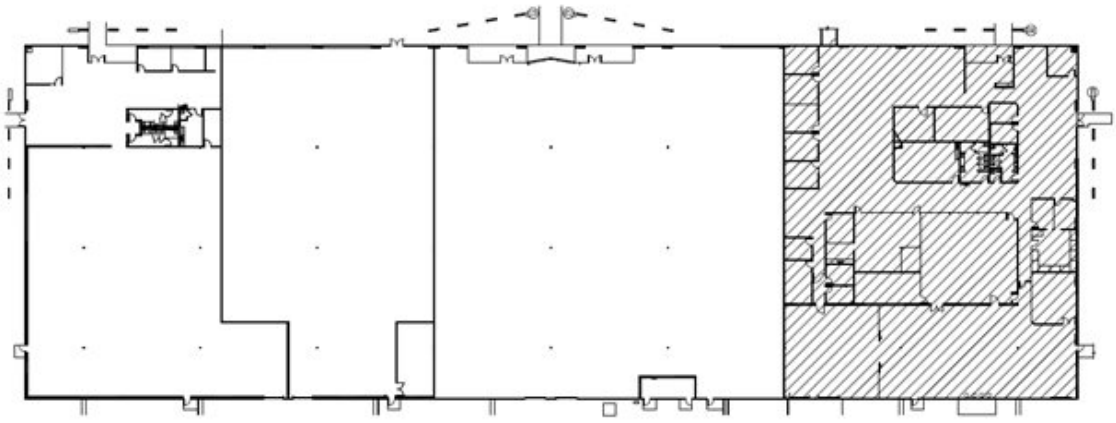

EXHIBIT B

CREEKSIDE BUSINESS PARK

TENANT WORK LETTER

This Tenant Work Letter shall set forth the terms and conditions relating to the construction of the tenant improvements in the Premises. This Tenant Work Letter is essentially organized chronologically and addresses the issues of the construction of the Premises, in sequence, as such issues will arise during the actual construction of the Premises. All references in this Tenant Work Letter to Articles or Sections of "this Lease" shall mean the relevant portion of Articles 1 through 29 of the Office Lease to which this Tenant Work Letter is attached as **Exhibit B** and of which this Tenant Work Letter forms a part, and all references in this Tenant Work Letter to Sections of "this Tenant Work Letter" shall mean the relevant portion of Sections 1 through 6 of this Tenant Work Letter.

SECTION 1

LANDLORD'S INITIAL CONSTRUCTION IN THE PREMISES

Landlord has constructed, at its sole cost and expense, the base, shell, and core (i) of the Premises and (ii) of the floor of the Building on which the Premises is located (collectively, the "**Base, Shell, and Core**"). The Base, Shell and Core shall consist of those portions of the Premises which were in existence prior to the construction of the tenant improvements in the Premises. Notwithstanding anything set forth in this Tenant Work Letter to the contrary, Tenant shall accept the Base, Shell and Core from Landlord in their presently existing, "as-is" condition.

SECTION 2

TENANT IMPROVEMENTS

2.1 **Tenant Improvement Allowance**. Tenant shall be entitled to a one-time tenant improvement allowance (the "**Tenant Improvement Allowance**"), in the amount set forth in Section **5** of the Summary, for the costs relating to the initial design and construction of Tenant's improvements which are permanently affixed to the Premises (the "**Tenant Improvements**"). In no event shall Landlord be obligated to make disbursements pursuant to this Tenant Work Letter in a total amount which exceeds the Tenant Improvement Allowance and "Landlord's Drawing Contribution," as that term is defined in Section 3.1, below. In the event that the Tenant Improvement Allowance is not fully disbursed by Landlord to, or on behalf of, Tenant on or before the date which is one (1) year following the Lease Commencement Date, then such unused amounts shall revert to Landlord, and Tenant shall have no further rights with respect thereto. Any Tenant Improvements that require the use of Building risers, raceways, shafts and/or conduits, shall be subject to Landlord's reasonable rules, regulations, and restrictions, including the requirement that any cabling vendor must be selected from a list provided by Landlord, and that the amount and location of any such cabling must be approved by Landlord. All Tenant Improvements for which the Tenant Improvement Allowance has been made available shall be deemed Landlord's property under the terms of the Lease; provided, however, Landlord may, by written notice to Tenant prior to the end of the Lease Term, or given following any earlier termination of this Lease, require Tenant, at Tenant's expense, to remove any Tenant Improvements and to repair any damage to the Premises and Building caused by such removal and return the affected portion of the Premises to their condition existing prior to the installment of such Tenant Improvements.

2.2 **Disbursement of the Tenant Improvement Allowance**. Except as otherwise set forth in this Tenant Work Letter, the Tenant Improvement Allowance shall be disbursed by Landlord (each of which disbursements shall be made pursuant to Landlord's disbursement process) only for the following items and costs (collectively, the "**Tenant Improvement Allowance Items**"):

2.2.1 Payment of the fees of the "Architect" and the "Engineers," as those terms are defined in Section 3.1 of this Tenant Work Letter, which fees shall, notwithstanding anything to the contrary contained in this Tenant Work Letter, not exceed an aggregate amount equal to $2.00 per rentable square foot of the Premises, and payment of the fees incurred by, and the cost of documents and materials supplied by, Landlord and Landlord's consultants in connection with the preparation and review of the "Construction Drawings," as that term is defined in Section 3.1 of this Tenant Work Letter;

2.2.2 The payment of plan check, permit and license fees relating to construction of the Tenant Improvements;

2.2.3 The cost of construction of the Tenant Improvements, including, without limitation, testing and inspection costs, freight elevator usage, hoisting and trash removal costs, and contractors' fees and general conditions;

2.2.4 The cost of any changes in the Base, Shell and Core when such changes are required by the Construction Drawings (including if such changes are due to the fact that such work is prepared on an unoccupied basis), such cost to include all direct architectural and/or engineering fees and expenses incurred in connection therewith;

2.2.5 The cost of any changes to the Construction Drawings or Tenant Improvements required by all applicable building codes (the "**Code**"); and

2.2.6 The cost of connection of the Premises to the Building's energy management systems.

2.3 **Standard Tenant Improvement Package**. Landlord has established specifications (the "**Specifications**") for the Building standard components to be used in the construction of the Tenant Improvements in the Premises (collectively, the "**Standard Improvement Package**"), which Specifications shall be supplied to Tenant by Landlord. The quality of Tenant Improvements shall be equal to or of greater quality than the quality of the Specifications, provided that Landlord may, at Landlord's option, require the Tenant Improvements to comply with certain Specifications. Landlord may make changes to the Specifications for the Standard Improvement Package from time to time.

SECTION 3

CONSTRUCTION DRAWINGS

3 . 1 **Selection of Architect/Construction Drawings**. Tenant shall retain the architect/space planner designated by Landlord (the "**Architect**") to prepare the "Construction Drawings," as that term is defined in this Section 3.1. Landlord shall pay to Tenant, as a cost ("**Landlord's Drawing Contribution**") not to be deducted from the Tenant Improvement Allowance but in an amount not to exceed $0.12 per rentable square foot of the Premises, the cost of one (1) preliminary space plan for the Premises, but not the cost of any revisions thereto requested by Tenant or required by Landlord, and only to the extent such drawings reflect items from the Building standards and no portion of the Landlord's Drawing Contribution, if any, remaining after the completion of the Tenant Improvements shall be available for use by Tenant. Tenant shall retain the engineering consultants designated by Landlord (the "**Engineers**") to prepare all plans and engineering working drawings relating to the structural, mechanical, electrical, plumbing, HVAC, life safety, and sprinkler work of the Tenant Improvements. The plans and drawings to be prepared by Architect and the Engineers hereunder shall be known collectively as the "Construction Drawings." Tenant shall be required to include in its contracts with the Architect and the Engineers a provision which requires ownership of all Construction Drawings to be transferred to Tenant upon the Substantial Completion of the Tenant Improvements and Tenant hereby grants to Landlord a non-exclusive right to use such Construction Drawings, including, without limitation, a right to make copies thereof. All Construction Drawings shall comply with the drawing format and specifications as determined by Landlord, and shall be subject to Landlord's approval. Tenant and Architect shall verify, in the field, the dimensions and conditions as shown on the relevant portions of the base Building plans, and Tenant and Architect shall be solely responsible for the same, and Landlord shall have no responsibility in connection therewith. Landlord's review of the Construction Drawings as set forth in this Section 3, shall be for its sole purpose and shall not imply Landlord's review of the same, or obligate Landlord to review the same, for quality, design, Code compliance or other like matters. Accordingly, notwithstanding that any Construction Drawings are reviewed by Landlord or its space planner, architect, engineers and consultants, and notwithstanding any advice or assistance which may be rendered to Tenant by Landlord or Landlord's space planner, architect, engineers, and consultants, Landlord shall have no liability whatsoever in connection therewith and shall not be responsible for any omissions or errors contained in the Construction Drawings, and Tenant's waiver and indemnity set forth in this Lease shall specifically apply to the Construction Drawings.

3.2 **Final Space Plan**. On or before the date set forth in Schedule 1, attached hereto, Tenant and the Architect shall prepare the final space plan for Tenant Improvements in the Premises (collectively, the "**Final Space Plan**"), which Final Space Plan shall include a layout and designation of all offices, rooms and other partitioning, their intended use, and equipment to be contained therein, and shall deliver four (4) copies signed by Tenant of the Final Space Plan to Landlord for Landlord's approval.

3.3 **Final Working Drawings**. On or before the date set forth in Schedule 1, Tenant, the Architect and the Engineers shall complete the architectural and engineering drawings for the Premises, and the final architectural working drawings in a form which is complete to allow subcontractors to bid on the work and to obtain all applicable permits (collectively, the "**Final Working Drawings**") and shall submit two (2) copies signed by Tenant of the same to Landlord for Landlord's approval.

3.4 **Permits**. The Final Working Drawings shall be approved by Landlord (the "**Approved Working Drawings**") prior to the commencement of the construction of the Tenant Improvements. Tenant shall immediately submit the Approved Working Drawings to the appropriate municipal authorities for all applicable building permits necessary to allow "Contractor," as that term is defined in Section 4.1, below, to commence and fully complete the construction of the Tenant Improvements (the "**Permits**"), and, in connection therewith, Tenant shall coordinate with Landlord in order to allow Landlord, at its option, to take part in all phases of the permitting process and shall supply Landlord, as soon as possible, with all plan check numbers and dates of submittal and obtain the Permits on or before the date set forth in Schedule 1. Notwithstanding anything to the contrary set forth in this Section 3.4, Tenant hereby agrees that neither Landlord nor Landlord's consultants shall be responsible for obtaining any building permit or certificate of occupancy for the Premises and that the obtaining of the same shall be Tenant's responsibility; provided however that Landlord shall, in any event, cooperate with Tenant in executing permit applications and performing other ministerial acts reasonably necessary to enable Tenant to obtain any such permit or certificate of occupancy. No changes, modifications or alterations in the Approved Working Drawings may be made without the prior written consent of Landlord, provided that Landlord may withhold its consent, in its sole discretion, to any change in the Approved Working Drawings if such change would directly or indirectly delay the "Substantial Completion" of the Premises as that term is defined in Section 5.1 of this Tenant Work Letter.

3.5 **Time Deadlines**. Tenant shall use its best, good faith, efforts and all due diligence to cooperate with the Architect, the Engineers, and Landlord to complete all phases of the Construction Drawings and the permitting process and to receive the permits, and with Contractor for approval of the "Cost Proposal," as that term is defined in Section 4.2 of this Tenant Work Letter, as soon as possible after the execution of the Lease, and, in that regard, shall meet with Landlord on a scheduled basis to be determined by Landlord, to discuss Tenant's progress in connection with the same. The applicable dates for approval of items, plans and drawings as described in this Section 3, Section 4, below, and in this Tenant Work Letter are set forth and further elaborated upon in Schedule 1 (the "**Time Deadlines**"), attached hereto. Tenant agrees to comply with the Time Deadlines.

SECTION 4

CONSTRUCTION OF THE TENANT IMPROVEMENTS

4.1 **Contractor**. A contractor designated by Landlord ("**Contractor**") shall construct the Tenant Improvements.

4.2 **Cost Proposal**. After the Approved Working Drawings are signed by Landlord and Tenant, Landlord shall provide Tenant with a cost proposal in accordance with the Approved Working Drawings, which cost proposal shall include, as nearly as possible, the cost of all Tenant Improvement Allowance Items to be incurred by Tenant in connection with the design and construction of the Tenant Improvements (the "**Cost Proposal**"). Tenant shall approve and deliver the Cost Proposal to Landlord within five (5) business days of the receipt of the same, and upon receipt of the same by Landlord, Landlord shall be released by Tenant to purchase the items set forth in the Cost Proposal and to commence the construction relating to such items. The date by which Tenant must approve and deliver the Cost Proposal to Landlord shall be known hereafter as the "**Cost Proposal Delivery Date**".

4.3 **Construction of Tenant Improvements by Contractor under the Supervision of Landlord**.

4.3.1 **Over-Allowance Amount**. On the Cost Proposal Delivery Date, Tenant shall deliver to Landlord cash in an amount (the "**Over-Allowance Amount**") equal to the difference between (i) the amount of the Cost Proposal and (ii) the amount of the Tenant Improvement Allowance. The Over-Allowance Amount shall be disbursed by Landlord prior to the disbursement of any then remaining portion of the Tenant Improvement Allowance, and such disbursement shall be pursuant to the same procedure as the Tenant Improvement Allowance. In the event that, after the Cost Proposal Delivery Date, any revisions, changes, or substitutions shall be made to the Construction Drawings or the Tenant Improvements, any additional costs which arise in connection with such revisions, changes or substitutions or any other additional costs shall be paid by Tenant to Landlord immediately upon Landlord's request as an addition to the Over-Allowance Amount.

4.3.2 **Landlord's Retention of Contractor**. Landlord shall independently retain Contractor, on behalf of Tenant, to construct the Tenant Improvements in accordance with the Approved Working Drawings (subject to the following sentence) and the Cost Proposal and Landlord shall supervise the construction by Contractor, and Tenant shall pay a construction supervision and management fee (the "**Landlord Supervision Fee**") to Landlord in an amount equal to the sum of (i) an amount equal to three percent (3%) of the Tenant Improvement Allowance plus the Over-Allowance Amount (as such Over-Allowance Amount may increase pursuant to the terms of this Tenant Work Letter). In the event of a conflict between the Approved Working Drawings and Landlord's construction rules and regulations, Landlord, in its sole and absolute discretion, shall determine which shall prevail. Notwithstanding anything set forth in this Tenant Work Letter to the contrary, construction of the Tenant Improvements shall not commence until (a) Landlord has a fully executed and delivered contract with Contractor for the construction of the Tenant Improvements, (b) Tenant has procured and delivered to Landlord a copy of all Permits, and (c) Tenant has delivered to Landlord the Over-Allowance Amount.

4.3.3 **Contractor's Warranties and Guaranties**. Landlord hereby assigns to Tenant all warranties and guaranties by Contractor relating to the Tenant Improvements, and Tenant hereby waives all claims against Landlord relating to, or arising out of the construction of, the Tenant Improvements.

4.3.4 **Tenant's Covenants**. Tenant hereby indemnifies Landlord for any loss, claims, damages or delays arising from the actions of Architect on the Premises or in the Building. Within ten (10) days after completion of construction of the Tenant Improvements, Tenant shall cause Contractor and Architect to cause a Notice of Completion to be recorded in the office of the County Recorder of the county in which the Building is located in accordance with Section 8182 of the Civil Code of the State of California or any successor statute and furnish a copy thereof to Landlord upon recordation, failing which, Landlord may itself execute and file the same on behalf of Tenant as Tenant's agent for such purpose. In addition, within thirty (30) days following the Substantial Completion of the Premises, Tenant shall have prepared and delivered to the Building two (2) copies signed by Tenant of the "as built" plans and specifications (including all working drawings) for the Tenant Improvements.

SECTION 5

COMPLETION OF THE TENANT IMPROVEMENTS; LEASE COMMENCEMENT DATE

5.1 **Ready for Occupancy**. The Premises shall be deemed "**Ready for Occupancy**" upon the Substantial Completion of the Premises. For purposes of this Lease, "**Substantial Completion**" of the Premises shall occur upon the completion of construction of the Tenant Improvements in the Premises pursuant to the Approved Working Drawings, with the exception of any punch list items and any tenant fixtures, work-stations, built-in furniture, or equipment to be installed by Tenant or under the supervision of Contractor.

5.2 **Delay of the Substantial Completion of the Premises**. Except as provided in this Section 5.2, the Lease Commencement Date shall occur as set forth in the Lease and Section 5.1, above. If there shall be a delay or there are delays in the Substantial Completion of the Premises or in the occurrence of any of the other conditions precedent to the Lease Commencement Date, as set forth in the Lease, as a direct, indirect, partial, or total result of:

5.2.1 Tenant's failure to comply with the Time Deadlines;

5.2.2 Tenant's failure to timely approve any matter requiring Tenant's approval;

5.2.3 A breach by Tenant of the terms of this Tenant Work Letter or the Lease;

5.2.4 Changes in any of the Construction Drawings after disapproval of the same by Landlord or because the same do not comply with Code or other applicable laws;

5.2.5 Tenant's request for changes in the Approved Working Drawings;

5.2.6 Tenant's requirement for materials, components, finishes or improvements which are not available in a commercially reasonable time given the anticipated date of Substantial Completion of the Premises, as set forth in the Lease, or which are different from, or not included in, the Standard Improvement Package;

5.2.7 Changes to the Base, Shell and Core required by the Approved Working Drawings; or

5.2.8 Any other acts or omissions of Tenant, or its agents, or employees;

then, notwithstanding anything to the contrary set forth in the Lease or this Tenant Work Letter and regardless of the actual date of the Substantial Completion of the Premises, the date of the Substantial Completion of the Premises shall be deemed to be the date the Substantial Completion of the Premises would have occurred if no Tenant delay or delays, as set forth above, had occurred.

SECTION 6

MISCELLANEOUS

6.1 **Tenant's Entry Into the Premises Prior to Substantial Completion**. Provided that Tenant and its agents do not interfere with Contractor's work in the Building and the Premises, Contractor shall allow Tenant approximately four (4) weeks prior access to the Premises prior to the Substantial Completion of the Premises for the purpose of Tenant installing overstandard equipment or fixtures (including Tenant's data and telephone equipment) in the Premises. Prior to Tenant's entry into the Premises as permitted by the terms of this Section 6.1, Tenant shall submit a schedule to Landlord and Contractor, for their approval, which schedule shall detail the timing and purpose of Tenant's entry. Tenant shall hold Landlord harmless from and indemnify, protect and defend Landlord against any loss or damage to the Building or Premises and against injury to any persons caused by Tenant's actions pursuant to this Section 6.1.

6.2 **Freight Elevators**. Landlord shall, consistent with its obligations to other tenants of the Building, make the freight elevator reasonably available to Tenant in connection with initial decorating, furnishing and moving into the Premises.

6.3 **Tenant's Representative**. Tenant has designated Suresh Nair as its sole representative with respect to the matters set forth in this Tenant Work Letter, who, until further notice to Landlord, shall have full authority and responsibility to act on behalf of the Tenant as required in this Tenant Work Letter.

6.4 **Landlord's Representative**. Landlord has designated Rod Collings as its sole representative with respect to the matters set forth in this Tenant Work Letter, who, until further notice to Tenant, shall have full authority and responsibility to act on behalf of the Landlord as required in this Tenant Work Letter.

6.5 **Tenant's Agents**. All contractors, subcontractors, laborers, materialmen, and suppliers retained directly by Tenant shall be from a list of supplied by Landlord and shall all be union labor in compliance with the then existing master labor agreements.

6.6 **Time of the Essence in This Tenant Work Letter**. Unless otherwise indicated, all references herein to a "number of days" shall mean and refer to calendar days. In all instances where Tenant is required to approve or deliver an item, if no written notice of approval is given or the item is not delivered within the stated time period, at Landlord's sole option, at the end of such period the item shall automatically be deemed approved or delivered by Tenant and the next succeeding time period shall commence.

6.7 **Tenant's Lease Default**. Notwithstanding any provision to the contrary contained in this Lease, if an event of default as described in the Lease, or a default by Tenant under this Tenant Work Letter, has occurred at any time on or before the Substantial Completion of the Premises, then (i) in addition to all other rights and remedies granted to Landlord pursuant to the Lease, Landlord shall have the right to withhold payment of all or any portion of the Tenant Improvement Allowance and/or Landlord may cause Contractor to cease the construction of the Premises (in which case, Tenant shall be responsible for any delay in the Substantial Completion of the Premises caused by such work stoppage as set forth in Section 5 of this Tenant Work Letter), and (ii) all other obligations of Landlord under the terms of this Tenant Work Letter shall be forgiven until such time as such default is cured pursuant to the terms of the Lease.

EXHIBIT C

CREEKSIDE BUSINESS PARK

NOTICE OF LEASE TERM DATES

To: _____
_____
_____
_____

Re: Office Lease dated _____, 201_ between _____, LLC, a Delaware limited liability company ("**Landlord**"), and _____, a _____ ("**Tenant**") concerning Suite _____ on floor(s) _____ of the office building located at 5990 - 5996 Gleason Drive, Dublin, California.

Gentlemen:

In accordance with the Office Lease (the "**Lease**"), we wish to advise you and/or confirm as follows:

1. The Lease Term shall commence on or has commenced on _____ for a term of _____ ending on _____.

2. Rent commenced to accrue on _____, in the amount of _____.

3. If the Lease Commencement Date is other than the first day of the month, the first billing will contain a pro rata adjustment. Each billing thereafter, with the exception of the final billing, shall be for the full amount of the monthly installment as provided for in the Lease.

4. Your rent checks should be made payable to _____ at _____.

5. The exact number of rentable square feet within the Premises is _____ square feet.

6. Tenant's Share as adjusted based upon the exact number of rentable square feet within the Premises is _____%.

"Landlord":

_____,
a_____

By: _____
Its: _____

Agreed to and Accepted as
of _____, 201_.

"Tenant":

_____,
a_____

By: _____
Its: _____

EXHIBIT D

CREEKSIDE BUSINESS PARK

RULES AND REGULATIONS

Tenant shall faithfully observe and comply with the following Rules and Regulations. Landlord shall not be responsible to Tenant for the nonperformance of any of said Rules and Regulations by or otherwise with respect to the acts or omissions of any other tenants or occupants of the Project. In the event of any conflict between the Rules and Regulations and the other provisions of this Lease, the latter shall control.

1. Tenant shall not alter any lock or install any new or additional locks or bolts on any doors or windows of the Premises without obtaining Landlord's prior written consent. Tenant shall bear the cost of any lock changes or repairs required by Tenant. Two keys will be furnished by Landlord for the Premises, and any additional keys required by Tenant must be obtained from Landlord at a reasonable cost to be established by Landlord. Upon the termination of this Lease, Tenant shall restore to Landlord all keys of stores, offices, and toilet rooms, either furnished to, or otherwise procured by, Tenant and in the event of the loss of keys so furnished, Tenant shall pay to Landlord the cost of replacing same or of changing the lock or locks opened by such lost key if Landlord shall deem it necessary to make such changes.

2. All doors opening to public corridors shall be kept closed at all times except for normal ingress and egress to the Premises, and except to the extent required by applicable laws or codes.

3. Landlord reserves the right to close and keep locked all entrance and exit doors of the Building during such hours as are customary for comparable buildings in the vicinity of the Building. Tenant, its employees and agents must be sure that the doors to the Building are securely closed and locked when leaving the Premises if it is after the normal hours of business for the Building. Any tenant, its employees, agents or any other persons entering or leaving the Building at any time when it is so locked, or any time when it is considered to be after normal business hours for the Building, may be required to sign the Building register. Access to the Building may be refused unless the person seeking access has proper identification or has a previously arranged pass for access to the Building. Landlord will furnish passes to persons for whom Tenant requests same in writing. Tenant shall be responsible for all persons for whom Tenant requests passes and shall be liable to Landlord for all acts of such persons. The Landlord and his agents shall in no case be liable for damages for any error with regard to the admission to or exclusion from the Building of any person. In case of invasion, mob, riot, public excitement, or other commotion, Landlord reserves the right to prevent access to the Building or the Project during the continuance thereof by any means it deems appropriate for the safety and protection of life and property.

4. No equipment to be used by Tenant as part of Tenant's operations for the Permitted Use shall be brought into the Building without prior notice to Landlord. All moving activity into or out of the Building shall be scheduled with Landlord and done only at such time and in such manner as Landlord reasonably designates. Landlord shall have the right to prescribe the weight, size and position of all safes and other heavy property brought into the Building and also the times and manner of moving the same in and out of the Building. Safes and other heavy objects shall, if considered necessary by Landlord, stand on supports of such thickness as is necessary to properly distribute the weight. Landlord will not be responsible for loss of or damage to any such safe or property in any case. Any damage to any part of the Building, its contents, occupants or visitors by moving or maintaining any such safe or other property shall be the sole responsibility and expense of Tenant.

5. No furniture, packages, supplies, equipment or merchandise will be received in the Building or carried up or down in the elevators, except between such hours, in such specific elevator and by such personnel as shall be designated by Landlord.

6. The requirements of Tenant will be attended to only upon application at the management office for the Project or at such office location designated by Landlord. Employees of Landlord shall not perform any work or do anything outside their regular duties unless under special instructions from Landlord.

7. No sign, advertisement, notice or handbill shall be exhibited, distributed, painted or affixed by Tenant on any part of the Premises or the Building without the prior written consent of the Landlord. Tenant shall not disturb, solicit, peddle, or canvass any occupant of the Project and shall cooperate with Landlord and its agents of Landlord to prevent same.

8. The toilet rooms, urinals, wash bowls and other apparatus shall not be used for any purpose other than that for which they were constructed, and no foreign substance of any kind whatsoever shall be thrown therein. The expense of any breakage, stoppage or damage resulting from the violation of this rule shall be borne by the tenant who, or whose servants, employees, agents, visitors or licensees shall have caused same.

9. Tenant shall not overload the floor of the Premises, nor mark, drive nails or screws, or drill into the partitions, woodwork or drywall or in any way deface the Premises or any part thereof without Landlord's prior written consent. Tenant shall not purchase spring water, ice, towel, linen, maintenance or other like services from any person or persons not approved by Landlord.

10. Except for vending machines intended for the sole use of Tenant's employees and invitees, no vending machine or machines other than fractional horsepower office machines shall be installed, maintained or operated upon the Premises without the written consent of Landlord.

11. Tenant shall not use or keep in or on the Premises, the Building, or the Project any kerosene, gasoline or other inflammable or combustible fluid, chemical, substance or material, except as previously approved by Landlord pursuant to the terms of this Lease (specifically including Section 29.34 of this Lease).

12. Tenant shall not without the prior written consent of Landlord use any method of heating or air conditioning other than that supplied by Landlord.

13. Tenant shall not use, keep or permit to be used or kept, any foul or noxious gas or substance in or on the Premises , except as previously approved by Landlord pursuant to the terms of this Lease (specifically including Section 29.34 of this Lease), or permit or allow the Premises to be occupied or used in a manner offensive or objectionable to Landlord or other occupants of the Project by reason of noise, odors, or vibrations, or interfere with other tenants or those having business therein, whether by the use of any musical instrument, radio, phonograph, or in any other way. Tenant shall not throw anything out of doors, windows or skylights or down passageways.

14. Tenant shall not bring into or keep within the Project, the Building or the Premises any firearms, animals, birds, aquariums, or, except in areas designated by Landlord, bicycles or other vehicles.

15. No cooking shall be done or permitted on the Premises, nor shall the Premises be used for lodging or for any improper, objectionable or immoral purposes. Notwithstanding the foregoing, Underwriters' laboratory-approved equipment and microwave ovens may be used in the Premises for heating food and brewing coffee, tea, hot chocolate and similar beverages for employees and visitors, provided that such use is in accordance with all applicable federal, state, county and city laws, codes, ordinances, rules and regulations.

16. The Premises shall not be used for manufacturing or for the storage of merchandise, except as previously approved by Landlord pursuant to the terms of this Lease (specifically including Section 29.34 of this Lease). Tenant shall not occupy or permit any portion of the Premises to be occupied as an office for a messenger-type operation or dispatch office, public stenographer or typist, or for the manufacture or sale of liquor, narcotics, or tobacco in any form, or as a medical office, or as a barber or manicure shop, or as an employment bureau without the express prior written consent of Landlord. Tenant shall not engage or pay any employees on the Premises except those actually working for such tenant on the Premises nor advertise for laborers giving an address at the Premises.

17. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs, or who shall in any manner do any act in violation of any of these Rules and Regulations.

18. Tenant, its employees and agents shall not loiter in or on the entrances, corridors, sidewalks, lobbies, courts, halls, stairways, elevators, vestibules or any Common Areas for the purpose of smoking tobacco products or for any other purpose, nor in any way obstruct such areas, and shall use them only as a means of ingress and egress for the Premises.

19. Tenant shall not waste electricity, water or air conditioning and agrees to cooperate fully with Landlord to ensure the most effective operation of the Building's heating and air conditioning system, and shall refrain from attempting to adjust any controls.

20. Tenant shall store all its trash and garbage within the interior of the Premises. No material shall be placed in the trash boxes or receptacles if such material is of such nature that it may not be disposed of in the ordinary and customary manner of removing and disposing of trash and garbage in city in which the Building is located without violation of any law or ordinance governing such disposal. All trash, garbage and refuse disposal shall be made only through entry-ways and elevators provided for such purposes at such times as Landlord shall designate.

21. Tenant shall comply with all safety, fire protection and evacuation procedures and regulations established by Landlord or any governmental agency.

22. Any persons employed by Tenant to do janitorial work shall be subject to the prior written approval of Landlord, and while in the Building and outside of the Premises, shall be subject to and under the control and direction of the Building manager (but not as an agent or servant of such manager or of Landlord), and Tenant shall be responsible for all acts of such persons.

23. No awnings or other projection shall be attached to the outside walls of the Building without the prior written consent of Landlord, and no curtains, blinds, shades or screens shall be attached to or hung in, or used in connection with, any window or door of the Premises other than Landlord standard drapes. All electrical ceiling fixtures hung in the Premises or spaces along the perimeter of the Building must be fluorescent and/or of a quality, type, design and a warm white bulb color approved in advance in writing by Landlord. Neither the interior nor exterior of any windows shall be coated or otherwise sunscreened without the prior written consent of Landlord. Tenant shall abide by Landlord's regulations concerning the opening and closing of window coverings which are attached to the windows in the Premises, if any, which have a view of any interior portion of the Building or Building Common Areas.

24. The sashes, sash doors, skylights, windows, and doors that reflect or admit light and air into the halls, passageways or other public places in the Building shall not be covered or obstructed by Tenant, nor shall any bottles, parcels or other articles be placed on the windowsills.

25. Tenant must comply with written requests by the Landlord concerning the informing of their employees of items of importance to the Landlord.

26. Tenant must comply with the State of California "**No-Smoking**" law set forth in California Labor Code Section 6404.5, and any local "No-Smoking" ordinance which may be in effect from time to time and which is not superseded by such State law.

27 Tenant hereby acknowledges that Landlord shall have no obligation to provide guard service or other security measures for the benefit of the Premises, the Building or the Project. Tenant hereby assumes all responsibility for the protection of Tenant and its agents, employees, contractors, invitees and guests, and the property thereof, from acts of third parties, including keeping doors locked and other means of entry to the Premises closed, whether or not Landlord, at its option, elects to provide security protection for the Project or any portion thereof. Tenant further assumes the risk that any safety and security devices, services and programs which Landlord elects, in its sole discretion, to provide may not be effective, or may malfunction or be circumvented by an unauthorized third party, and Tenant shall, in addition to its other insurance obligations under this Lease, obtain its own insurance coverage to the extent Tenant desires protection against losses related to such occurrences. Tenant shall cooperate in any reasonable safety or security program developed by Landlord or required by law.

28. All equipment of any electrical or mechanical nature shall be placed by Tenant in the Premises in settings consistent with manufacturers specifications, to absorb or prevent any vibration, noise and annoyance.

29. Tenant shall not use in any space or in the public halls of the Building, any hand trucks except those equipped with rubber tires and rubber side guards.

30. No auction, liquidation, fire sale, going-out-of-business or bankruptcy sale shall be conducted in the Premises without the prior written consent of Landlord.

31. No tenant shall use or permit the use of any portion of the Premises for living quarters, sleeping apartments or lodging rooms.

Landlord reserves the right at any time to change or rescind any one or more of these Rules and Regulations, or to make such other and further reasonable Rules and Regulations as in Landlord's judgment may from time to time be necessary for the management, safety, care and cleanliness of the Premises, Building, the Common Areas and the Project, and for the preservation of good order therein, as well as for the convenience of other occupants and tenants therein. Landlord may waive any one or more of these Rules and Regulations for the benefit of any particular tenants, but no such waiver by Landlord shall be construed as a waiver of such Rules and Regulations in favor of any other tenant, nor prevent Landlord from thereafter enforcing any such Rules or Regulations against any or all tenants of the Project. Tenant shall be deemed to have read these Rules and Regulations and to have agreed to abide by them as a condition of its occupancy of the Premises.

EXHIBIT E

CREEKSIDE BUSINESS PARK

FORM OF TENANT'S ESTOPPEL CERTIFICATE

The undersigned as Tenant under that certain Office Lease (the " **Lease**") made and entered into as of _____, 201_ by and between SFII CREEKSIDE, LLC, a Delaware limited liability company, as Landlord, and the undersigned as Tenant, for Premises on the _____ floor(s) of the office building located at 5990 - 5996 Gleason Drive, Dublin, California, certifies as follows:

1. Attached hereto as **Exhibit A** is a true and correct copy of the Lease and all amendments and modifications thereto. The documents contained in **Exhibit A** represent the entire agreement between the parties as to the Premises.

2. The undersigned currently occupies the Premises described in the Lease, the Lease Term commenced on _____, and the Lease Term expires on _____, and the undersigned has no option to terminate or cancel the Lease or to purchase all or any part of the Premises, the Building and/or the Project.

3. Base Rent became payable on _____.

4. The Lease is in full force and effect and has not been modified, supplemented or amended in any way except as provided in **Exhibit A**.

5. Tenant has not transferred, assigned, or sublet any portion of the Premises nor entered into any license or concession agreements with respect thereto except as follows:

6. Tenant shall not modify the documents contained in **Exhibit A** without the prior written consent of Landlord's mortgagee.

7. All monthly installments of Base Rent, all Additional Rent and all monthly installments of estimated Additional Rent have been paid when due through _____. The current monthly installment of Base Rent is $_____.

8. All conditions of the Lease to be performed by Landlord necessary to the enforceability of the Lease have been satisfied and Landlord is not in default thereunder. In addition, the undersigned has not delivered any notice to Landlord regarding a default by Landlord thereunder.

9. No rental has been paid more than thirty (30) days in advance and no security has been deposited with Landlord except as provided in the Lease.

10. As of the date hereof, there are no existing defenses or offsets, or, to the undersigned's knowledge, claims or any basis for a claim, that the undersigned has against Landlord.

11. If Tenant is a corporation or partnership, each individual executing this Estoppel Certificate on behalf of Tenant hereby represents and warrants that Tenant is a duly formed and existing entity qualified to do business in the State of California and that Tenant has full right and authority to execute and deliver this Estoppel Certificate and that each person signing on behalf of Tenant is authorized to do so.

12. There are no actions pending against the undersigned under the bankruptcy or similar laws of the United States or any state.

13. Other than in compliance with all applicable laws and incidental to the ordinary course of the use of the Premises, the undersigned has not used or stored any hazardous substances in the Premises.

14. To the undersigned's knowledge, all tenant improvement work to be performed by Landlord under the Lease has been completed in accordance with the Lease and has been accepted by the undersigned and all reimbursements and allowances due to the undersigned under the Lease in connection with any tenant improvement work have been paid in full.

The undersigned acknowledges that this Estoppel Certificate may be delivered to Landlord or to a prospective mortgagee or prospective purchaser, and acknowledges that said prospective mortgagee or prospective purchaser will be relying upon the statements contained herein in making the loan or acquiring the property of which the Premises are a part and that receipt by it of this certificate is a condition of making such loan or acquiring such property.

Executed at _____ on the ____ day of _____, 201_.

"Tenant":

_____,
a_____

By: _____
Its: _____

By: _____
Its: _____

EXHIBIT F

CREEKSIDE BUSINESS PARK

APPROVED HAZARDOUS MATERIALS EXHIBIT

ENVIRONMENTAL QUESTIONNAIRE
FOR COMMERCIAL AND INDUSTRIAL PROPERTIES

Property Name: _____

Property Address: _____

Instructions: The following questionnaire is to be completed by the Lessee representative with knowledge of the planned operations for the specified building/location. Please print clearly and attach additional sheets as necessary.

1.0 PROCESS INFORMATION

Describe planned use, and include brief description of manufacturing processes employed.

_____

_____

_____

2.0 HAZARDOUS MATERIALS

Are hazardous materials used or stored? If so, continue with the next question. If not, go to Section 3.0.

2.1 Are any of the following materials handled on the Property?

Yes ☐ No ☐

(A material is handled if it is used, generated, processed, produced, packaged, treated, stored, emitted, discharged, or disposed.) If so, complete this section. If this question is not applicable, skip this section and go on to Section 5.0.

☐ Explosives	☐ Fuels	☐ Oils
☐ Solvents	☐ Oxidizers	☐ Organics/Inorganics
☐ Acids	☐ Bases	☐ Pesticides
☐ Gases	☐ PCBs	☐ Radioactive Materials
☐ Other (please specify)		

2-2. If any of the groups of materials checked in Section 2.1, please list the specific material(s), use(s), and quantity of each chemical used or stored on the site in the Table below. If convenient, you may substitute a chemical inventory and list the uses of each of the chemicals in each category separately.

Material	Physical State (Solid, Liquid, or Gas)	Usage	Container Size	Number of Containers	Total Quantity

2-3. Describe the planned storage area location(s) for these materials. Please include site maps and drawings as appropriate.

3.0 HAZARDOUS WASTES

Are hazardous wastes generated?

Yes ☐ No ☐

If yes, continue with the next question. If not, skip this section and go to section 4.0.

3.1 Are any of the following wastes generated, handled, or disposed of (where applicable) on the Property?

☐ Hazardous wastes ☐ Industrial Wastewater
☐ Waste oils ☐ PCBs
☐ Air emissions ☐ Sludges
☐ Regulated Wastes ☐ Other (please specify)

3-2. List and quantify the materials identified in Question 3-1 of this section.

WASTE GENERATED	RCRA listed Waste?	SOURCE	APPROXIMATE MONTHLY QUANTITY	WASTE CHARACTERIZATION	DISPOSITION

3-3. Please include name, location, and permit number (e.g. EPA ID No.) for transporter and disposal facility, if applicable). Attach separate pages as necessary.

Transporter/Disposal Facility Name	Facility Location	Transporter (I) or Disposal (D) Facility	Permit Number

3-4. Are pollution controls or monitoring employed in the process to prevent or minimize the release of wastes into the environment?

Yes ☐ No ☐

3-5. If so, please describe.

4.0 USTS/ASTS

4.1 Are underground storage tanks (USTs), aboveground storage tanks (ASTs), or associated pipelines used for the storage of petroleum products, chemicals, or liquid wastes present on site (lease renewals) or required for planned operations (new tenants)? Yes___ No___

If not, continue with section 5.0. If yes, please describe capacity, contents, age, type of the USTs or ASTs, as well any associated leak detection/spill prevention measures. Please attach additional pages if necessary.

Capacity	Contents	Year Installed	Type (Steel, Fiberglass, etc)	Associated Leak Detection / Spill Prevention Measures*

*Note: The following are examples of leak detection / spill prevention measures:

Integrity testing	Inventory reconciliation	Leak detection system
Overfill spill protection	Secondary containment	Cathodic protection

4-2. Please provide copies of written tank integrity test results and/or monitoring documentation, if available.

4-3. Is the UST/AST registered and permitted with the appropriate regulatory agencies? Yes ☐ No ☐
If so, please attach a copy of the required permits.

4-4. If this Questionnaire is being completed for a lease renewal, and if any of the USTs/ASTs have leaked, please state the substance released, the media(s) impacted (e.g., soil, water, asphalt, etc.), the actions taken, and all remedial responses to the incident.

4-5. If this Questionnaire is being completed for a lease renewal, have USTs/ASTs been removed from the Property? Yes ☐ No ☐

If yes, please provide any official closure letters or reports and supporting documentation (e.g., analytical test results, remediation report results, etc.).

4-6. For Lease renewals, are there any above or below ground pipelines on site used to transfer chemicals or wastes? Yes ☐ No ☐

For new tenants, are installations of this type required for the planned operations? Yes ☐ No ☐

If yes to either question, please describe.

5.0 ASBESTOS CONTAINING BUILDING MATERIALS

Please be advised that an asbestos survey may have been performed at the Property. If provided, please review the information that identifies the locations of known asbestos containing material or presumed asbestos containing material. All personnel and appropriate subcontractors should be notified of the presence of these materials, and informed not to disturb these materials. Any activity that involves the disturbance or removal of these materials must be done by an appropriately trained individual/contractor.

6.0 REGULATORY

6-1. Does the operation have or require a National Pollutant Discharge Elimination System (NPDES) or equivalent permit? Yes ☐ No ☐
If so, please attach a copy of this permit.

6-2. Has a Hazardous Materials Business Plan been developed for the site? Yes ☐ No ☐
If so, please attach a copy.

CERTIFICATION

I am familiar with the real property described in this questionnaire. By signing below, I represent and warrant that the answers to the above questions are complete and accurate to the best of my knowledge. I also understand that Lessor will rely on the completeness and accuracy of my answers in assessing any environmental liability risks associated with the property.

Signature: _____

Name: _____

Title: _____

Date: _____

Telephone: _____

OFFICE LEASE

CREEKSIDE BUSINESS PARK

DUBLIN, CALIFORNIA

SFII CREEKSIDE, LLC,

a Delaware limited liability company,

as Landlord,

and

GIGA-TRONICS INCORPORATED,

a California corporation,

as Tenant.

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Partners for Growth

Loan and Security Agreement

Borrower: **Giga-tronics Incorporated, a California corporation**
Address: **4650 Norris Canyon Road, San Ramon CA, 94583**

Borrower: **Microsource, Inc., a California corporation**
Address: **4650 Norris Canyon Road, San Ramon CA, 94583**

Date: **April 27, 2017**

THIS LOAN AND SECURITY AGREEMENT ("Agreement") is entered into on the above date (the "Effective Date") between PARTNERS FOR GROWTH V, L.P. ("PFG"), whose address is 1660 Tiburon Blvd., Suite D, Tiburon, CA 94920 and Borrower(s) named above (jointly and severally, "Borrower"), whose chief executive offices are located at the above addresses ("Borrower's Address"). The Schedule to this Agreement (the "Schedule") being signed by the parties concurrently, is an integral part of this Agreement. (Definitions of certain terms used in this Agreement are set forth in Section 7 below.)

1. LOANS.

1.1 Loans. PFG will make loans to Borrower (the "Loan" or "Loans") in the amount (s) shown on the Schedule subject at all times to, and notwithstanding any other provision of this Agreement, no Default or Event of Default having occurred and being continuing at any time a Loan is requested or made.

1.2 Interest. All Loans and all other monetary Obligations shall bear interest at the rates shown in the Schedule, except where otherwise expressly set forth in this Agreement. Interest shall be payable monthly on the first day of each month for interest accrued during the prior month (or such other Billing Period). Interest payable from time to time on Loan principal will be determined by multiplying outstanding Loan principal by the per annum interest rate set forth in Section 2 of the Schedule and dividing such product by 360 to render a daily interest amount, which daily interest amount will be multiplied by the actual number of days elapsed in each month (or other Billing Period) to derive the amount of interest due in such month (or other Billing Period). In computing interest, (i) all payments received after 12:00 p.m. U.S. Pacific time on any day shall be deemed received at the opening of business on the next Business Day, and (ii) the date of the making of any Loan shall be included and the date of payment shall be excluded; provided, however, that if any Loan is repaid on the same day on which it is made, such day shall be included in computing interest on such Loan.

1.3 Fees. Borrower shall pay PFG the fees shown on the Schedule, which are in addition to all interest, Lender Expenses and other sums payable to PFG, all of which are not refundable.

1.4 Loan Requests. To obtain a Loan, Borrower shall make a Qualifying Request to PFG compliant with Section 8.5. Loan Requests are not deemed made until PFG acknowledges receipt of the same by electronic mail or otherwise in writing. Without limiting the effect of Section 8.22, each Borrower appoints the Responsible Officer(s) as its authorized agent to make Loan Requests and any Loan Request made by such Responsible Officer(s) shall be binding on each Borrower as if made by its own respective officers who are duly authorized to bind Borrower in respect of this Agreement. PFG's obligation to fund a Loan Request shall be subject to its receipt of such reports, certificates and other information as may be set forth in the Schedule. Loan Requests received after 12:00 Noon U.S. Pacific time on any Business Day will not be deemed to have been received by PFG until the next Business Day. PFG may rely on any Loan Request given by a person whom PFG believes in good faith is a Responsible Officer, and Borrower will indemnify PFG for any loss PFG suffers as a result of that reliance.

1.5 Late Fee. If any payment of principal or interest Obligation is not received by PFG by the end of the third Business Day after the later of (i) the date for such payment to be received by PFG as reflected in any PFG invoice that may be sent from time to time to Borrower and (ii) such Obligation's Due Date, then upon each such failure to timely pay Borrower shall pay PFG a late payment fee equal to 5% of the amount of the payment due and not timely paid. Notwithstanding the foregoing, Borrower shall not incur the afore-specified late payment fee in respect of an Obligation contemplated within clause (ii) of the definition of Due Date that is capable of being reasonably estimated (such as the interest portion of a monthly payment where an intervening principal payment has also been made) so long as Borrower pays the greater of the amount reasonably estimated and the last such monthly payment made. If Borrower has overpaid the amount due based on its reasonable estimation, PFG will credit any such overpayment to the next payment due. If Borrower has underpaid based on its reasonable estimation, then so long as Borrower pays the amount of such underpayment within three Business Days of PFG's notice of such underpayment, no late payment fee shall apply to such underpayment. Notwithstanding anything to the contrary set forth in this Agreement, the imposition of any late payment fee and Borrower's payment thereof shall not be construed as PFG's consent to Borrower's failure to pay any amounts when due, and PFG's acceptance of any late payment shall not restrict PFG's exercise of any remedies arising out of any such failure, such as under Section 6 of this Agreement. Unless expressly waived in writing by PFG in its sole discretion, interest at the Default Rate shall commence to apply to all monetary Obligations not timely paid as from the date the relevant grace period (for payment prior to a late payment fee applying, as set forth above), expires.

1.6 Invoicing. PFG will endeavor to send invoices to Borrower (i) prior to the end of each month reflecting amounts due from time to time under or in connection with this Agreement, including for interest that will fall due through the end of each such month and (as applicable) recurring or scheduled principal payments, and (ii) from time to time not less than three Business Days before the Due Date for other non-recurring monetary Obligations and monetary Obligations not having a specified date for payment; provided, however, the failure of PFG to send or Borrower to receive an invoice for payment Obligations falling due shall in no event excuse Borrower from its obligation to timely make such payments. The responsibility to make payments so that they are received by PFG on or prior to the Due Date rests solely with Borrower.

2. SECURITY INTEREST.

2.1 Grant of Security Interest. To secure the payment and performance of all of the Obligations when due, Borrower hereby grants to PFG a continuing security interest in, and pledges to PFG, all of the following (collectively, the "Collateral"): all right, title and interest of Borrower in and to all of the following, whether now owned or hereafter arising or acquired and wherever located: all Accounts; all Inventory (except for MSI Bonded Inventory); all Equipment; all Collateral Accounts (including Deposit Accounts); all General Intangibles (including without limitation all Intellectual Property); all Investment Property; all Other Property; and any and all claims, rights and interests in any of the above, and all guaranties and security for any of the above, and all substitutions and replacements for, additions, accessions, attachments, accessories, and improvements to, and proceeds (including proceeds of any insurance policies, proceeds of proceeds and claims against third parties) of, any and all of the above and all Borrower's books relating to any and all of the above.

Notwithstanding anything herein to the contrary, that the Collateral will not include (a) any application for a Trademark that would otherwise be deemed invalidated, cancelled or abandoned due to the grant of a Lien thereon unless and until such time as the grant of such Lien will not affect the validity of such trademark, (b) any lease, license, contract, or agreement, if the grant of a security interest in such lease, license, contract, or agreement under the terms thereof or under applicable law with respect thereto, is prohibited and such prohibition has not been or is not waived or the consent of the other party to such lease, license, contract, or agreement has not been or is not otherwise obtained or under applicable law such prohibition cannot be waived, (c) more than 65% of the voting equity interests of any Subsidiary of Borrower organized in a jurisdiction outside of the United States, provided, however, such percentage shall be 100% unless Borrower demonstrates to PFG's reasonable satisfaction that pledging more than 65% of the voting equity interests of such Subsidiary would result in a material adverse tax consequence; (d) vehicles and other goods subject to a certificate of title, and (e) any deposit accounts used exclusively for payroll or employee benefit payment purposes; provided that (x) any such limitation described in the foregoing clause (b) on the security interests granted hereunder shall only apply to the extent that any such prohibition could not be rendered ineffective pursuant to the UCC or any other applicable law or principles of equity and (y) in the event of the termination or elimination of any such prohibition or the requirement for any consent contained in any applicable law, lease, license, contract or other agreement, to the extent sufficient to permit any such item to become Collateral hereunder, or upon the granting of any such consent, or waiving or terminating any requirement for such consent, a security interest in such lease, license, contract or other agreement shall be automatically and simultaneously granted hereunder and shall be included as Collateral hereunder.

3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF BORROWER.

In order to induce PFG to enter into this Agreement and to make Loans, Borrower represents and warrants to PFG as follows, and Borrower covenants that the following representations will continue to be true, except for representations expressly specified to be made as of a particular date, and that Borrower will at all times comply with all of the following covenants, throughout the term of this Agreement and thereafter until all Obligations (other than inchoate indemnity obligations) have been paid and performed in full:

3.1 Corporate Existence, Authority and Consents. Borrower is and will continue to be, duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation and has in full force and effect all Governmental Authorizations required for Borrower to lawfully conduct its business as conducted on the Effective Date. Borrower shall give PFG 30 days' prior written notice before changing its jurisdiction or form of organization. Borrower is and will continue to be qualified and licensed to do business in all jurisdictions in which any failure to do so could result in a Material Adverse Change. The execution, delivery and performance by Borrower of this Agreement, and all other documents contemplated hereby (i) have been duly and validly authorized, (ii) are enforceable against Borrower in accordance with their terms (except as enforcement may be limited by equitable principles and by bankruptcy, insolvency, reorganization, moratorium or similar Legal Requirements relating to creditors' rights generally), and (iii) do not violate Borrower's Constitutional Documents, or any material Legal Requirement or any material agreement or instrument of Borrower or relating to its property, (iv) does not require any action by, filing, registration or qualification with, or Governmental Authorization from, any Governmental Body (except such Governmental Authorizations which have already been obtained and are in full force and effect), and (v) do not constitute grounds for acceleration of any material Indebtedness or obligation under any agreement or instrument of Borrower or relating to its property. Without limiting the foregoing: (A) the Board has the authority under Borrower's Constitutional Documents to enter into and cause Borrower to perform, or to delegate such authority to a Responsible Officer to enter into and cause Borrower to perform, its Obligations, and (B) no consent is required of any Person other than such consents as have already been obtained or could reasonably result in a cost to or liability of Borrower in excess of $100,000.

3.2 Name; Trade Names and Styles. As of the Effective Date, the name of Borrower set forth in the heading to this Agreement is its correct name, as set forth in its Constitutional Documents. Listed in the Representations are all prior names of Borrower and all of Borrower's present and prior trade names as of the Effective Date. Borrower has complied, and will in the future comply, in all material respects, with all laws relating to the conduct of business under a fictitious business name, if applicable to Borrower.

3.3 Place of Business; Location of Collateral. As of the Effective Date, the address set forth in the heading to this Agreement is Borrower's chief executive office. In addition, as of the Effective Date, Borrower has places of business and Collateral is located only at the locations set forth in the Representations. Borrower will give PFG at least 30 days prior written notice before opening any additional place of business, changing its chief executive office (other than to the new address as from April 1, 2017 advised in the Representations), or moving any of the Collateral valued at greater than $10,000 to a location other than Borrower's Address or one of the locations set forth in the Representations, except that Borrower may (x) maintain sales offices in the ordinary course of business at which not more than a total of $10,000 fair market value of Equipment is located, and (y) provide Inventory up to $240,000 in any instance to customers on a temporary basis without having sold such Inventory, solely for the purposes of demonstration, consistent in form and substance with Borrower's past practice.

3.4 Title to Collateral; Perfection; Permitted Liens.

(a) Borrower is as of the Effective Date, and will at all times in the future be, the sole owner of all the Collateral, except for Collateral which is leased or licensed to Borrower. The Collateral is as of the Effective Date and will remain free and clear of any and all liens, charges, security interests, encumbrances and adverse claims, except for Permitted Liens. As of the Effective Date, PFG will have, and will continue to have, a First-Priority perfected and enforceable security interest in all of the Collateral, subject only to Permitted Liens, and Borrower will at all times defend the Liens granted to PFG hereunder and use commercially-reasonable efforts to defend the Collateral against all claims of others.

(b) Borrower has set forth in the Representations all of Borrower's Collateral Accounts as of the Effective Date, and Borrower shall (i) give PFG five Business Days advance written notice before establishing any new Collateral Accounts or (ii) depositing any Cash or Cash Equivalents or Investment Property into any new Collateral Account and (iii) subject to the rights of the Senior Lender, shall cause the institution where any such new Collateral Account is maintained to execute and deliver to PFG a Control Agreement in form legally and commercially sufficient to perfect PFG's security interest in the Collateral Account and otherwise reasonably satisfactory to PFG in its good faith business judgment.

(c) In the event that Borrower shall at any time after the Effective Date have any commercial tort claims against others, which it is asserting, and in which the potential recovery exceeds $100,000, Borrower shall promptly notify PFG thereof in writing and provide PFG with such information regarding the same as PFG shall request (unless providing such information would waive Borrower's attorney-client privilege). Such notification to PFG shall constitute a grant of a security interest in the commercial tort claim and all proceeds thereof to PFG, and Borrower shall execute and deliver all such documents and take all such actions as PFG shall request in connection therewith.

(d) As of the Effective Date, no Collateral with a value in excess of $100,000 is affixed to any real property in such a manner or with such intent as to become a fixture, except as disclosed in detail in Exhibit A. From and after the Effective Date, without PFG's consent in each instance, no material part of the Collateral will be affixed to any real property in such a manner, or with such intent, as to become a fixture. Borrower is not, except as set forth in Exhibit A, and will not become a lessee under any real property lease pursuant to which the lessor may obtain any rights in any of the Collateral and no such lease now prohibits, restrains, impairs or will prohibit, restrain or impair Borrower's right to remove any Collateral from the leased premises. Whenever any Collateral is located upon premises in which any third party has an interest, Borrower shall, whenever requested by PFG, use commercially reasonable efforts to cause such third party to execute and deliver to PFG, in form acceptable to PFG, such waivers and subordinations as PFG shall specify in its good faith business judgment; provided that, with respect to any property of Borrower which is considered work-in-process but not yet inventory and is temporarily located for finishing with a third party as part of Borrower's historic manufacturing process, no such third party waiver or subordination will be required with respect to such property so long as (x) temporarily locating such property with a third party is consistent with Borrower's past manufacturing processes and (y) such property is not located with any such third party for a period longer than the time required by such third party to complete the work on such property. Borrower will keep in full force and effect, and will comply with all material terms of, any lease of real property where any of the Collateral now or in the future may be located.

(e) Except as specified in the Representations, Borrower is not party to, nor is it bound by, any Restricted License.

3.5 Maintenance of Collateral. Borrower will maintain the Collateral in good working condition (ordinary wear and tear excepted), and Borrower will not use the Collateral for any unlawful purpose. Borrower will promptly advise PFG in writing of any material loss or damage to the Collateral.

3.6 Books and Records. Borrower has maintained and will maintain at Borrower's Address complete and accurate books and records, comprising an accounting system in accordance with GAAP.

3.7 Financial Condition, Statements and Reports. All Financial Statements now or in the future delivered to PFG have been, and will be, prepared in conformity with GAAP and now and in the future will fairly present the results of operations and financial condition of Borrower in all material respects, in accordance with GAAP, at the times and for the periods therein stated. Between the last date covered by any such statement provided to PFG and the Effective Date, there has been no Material Adverse Change.

3.8 Tax Returns and Payments; Pension Contributions. Borrower has timely filed, and will timely file, all material required Tax Returns, and Borrower has timely paid, and will timely pay, all Taxes now or in the future owed by Borrower. Borrower may, however, defer payment of any of the foregoing which are contested by Borrower in good faith, provided that Borrower (i) contests the same by appropriate proceedings promptly and diligently instituted and conducted, (ii) notifies PFG in writing of the commencement of, and any material development in, the proceedings, and (iii) posts bonds or takes any other steps required to keep the same from becoming a lien upon any of the Collateral. Borrower is unaware of any claims or adjustments proposed for any of Borrower's prior tax years which could result in additional Taxes becoming due and payable by Borrower. Borrower has paid, and shall continue to pay all amounts necessary to fund all present and future pension, profit sharing and deferred compensation plans in accordance with their terms, and Borrower has not and will not withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other Governmental Body.

3.9 Compliance with Law. Borrower has, to the best of its knowledge, complied, and will comply, in all material respects, with all provisions of all Legal Requirements applicable to Borrower, including, but not limited to, those relating to Borrower's ownership of real or personal property, the conduct and licensing of Borrower's business, and all environmental matters.

3.10 Litigation. Except as disclosed in Exhibit A hereto as of the Effective Date or disclosed in an update to the Representations as to future periods, there is no claim, suit, litigation, proceeding or investigation pending or (to Borrower's Knowledge) threatened against or affecting Borrower in any court or before any Governmental Body (or any basis therefor known to Borrower) (i) involving any single claim of $50,000 or more, or involving $100,000 or more in the aggregate, or (ii) which could reasonably be expected to result, either separately or in the aggregate, in any Material Adverse Change. Borrower will promptly inform PFG in writing of any claim, proceeding, litigation or investigation in the future threatened or instituted against Borrower involving any single claim of $50,000 or more, or involving $100,000 or more in the aggregate.

3.11 Use of Proceeds. All proceeds of all Loans shall be used solely for lawful business purposes, including any purposes detailed in the Schedule. Borrower is not purchasing or carrying any "margin stock" (as defined in Regulation U of the Board of Governors of the Federal Reserve System) and no part of the proceeds of any Loan will be used to purchase or carry any "margin stock" or to extend credit to others for the purpose of purchasing or carrying any "margin stock."

3.12 No Default. At the Effective Date, no Default or Event of Default has occurred, and no Default or Event of Default will have occurred after giving effect to any Loans being made concurrently herewith.

3.13 Protection and Registration of Intellectual Property Rights. Borrower owns or otherwise holds the right to use all Intellectual Property rights material to Borrower's business or necessary for the conduct of its business as currently conducted and reflected in any Borrower's Plans. Borrower shall: (a) protect, defend and maintain the validity and enforceability of its Intellectual Property, other than Intellectual Property that is not material to Borrower's business, has a fair value of less than $25,000 and that Borrower has affirmatively determined not to maintain or to abandon; (b) promptly advise PFG in writing of infringements of its Intellectual Property material to its business; (c) except as permitted in clause (a), not allow any Intellectual Property material to Borrower's business to be abandoned, forfeited or dedicated to the public without PFG's written consent, (d) provide (i) written notice to PFG at least ten (10) days prior to entering into or becoming bound by any Restricted License (other than over-the-counter software that is commercially available to the public and licenses or agreements of Borrower with customers in which Borrower is an original equipment manufacturer), and (ii) the consent or waiver of any Person whose consent or waiver is necessary for (A) any Restricted License to be deemed "Collateral" and for PFG to have a Lien in it that might otherwise be restricted or prohibited by law or by the terms of any such Restricted License, whether now existing or entered into in the future, and (B) PFG to have the ability in the event of a liquidation of any Collateral to dispose of such Collateral in accordance with PFG's rights and remedies under this Agreement and the other Loan Documents, and (e) while any Obligations are Outstanding, shall not Transfer any Intellectual Property without PFG's consent, which consent shall not be unreasonably withheld if no Default or Event of Default has occurred and is then continuing, the Transfer of such Intellectual Property would not give rise to such a Default or Event of Default, and if such Intellectual Property meets the three criteria set forth as the exceptions to Borrower's duties to protect, defend and maintain under clause (a), above. If, before the Obligations have been paid and/or performed in full, Borrower shall (i) adopt, use, acquire or apply for registration of any trademark, service mark or trade name, (ii) apply for registration of any patent or obtain any patent or patent application; (iii) create or acquire any published or material unpublished works of authorship material to the business that is or is to be registered with the U.S. Copyright Office or any non-U.S. equivalent; or (iv) register or acquire any domain name or domain name rights, then the provisions of Section 2.1 shall automatically apply thereto, and Borrower shall use all commercially reasonable efforts to give PFG advance written notice thereof and in any event shall thereafter give PFG prompt written notice thereof (which for purposes hereof shall be deemed to be not more than five (5) Business Days from the occurrence of each and any of the foregoing). Borrower shall further provide PFG with all information and details relating to the foregoing and take such further actions as PFG may reasonably request from time to time to enable PFG to perfect or continue the perfection of PFG's interest in such Collateral.

3.14 Domain Rights and Related Matters. Borrower (a) is the sole record, legal and beneficial owner of all domain names and domain name rights used in connection with its business and that of its Subsidiaries, free and clear of any rights or claims of any third party; (b) has set forth in the Representations with respect to domain names and ownership thereof, domain registry, domain servers, location and administrative contact information, web hosting and related services and facilities (collectively, "Domain Rights") is true, accurate and complete in all material respects and Borrower shall promptly notify PFG of any material changes to such information; (c) shall maintain all Domain Rights that Borrower has not affirmatively determined to abandon in full force and effect so long as any Obligations remain outstanding; (d) shall, upon request of PFG, notify such third parties (including domain registrars, hosting companies and internet service providers) of PFG's security interest in Borrower's Domain Rights; and (e) shall promptly advise PFG in writing of any material disputes or infringements of its Domain Rights. The obligations of Borrower under this Section shall not be limited by any Borrower obligations under the IP Security Agreement and related Collateral Agreements and Notices executed in connection with this Agreement.

3.15 Internal Controls. Parent maintains a system of internal controls, including, but not limited to, disclosure controls and procedures, internal controls over accounting matters and financial reporting and legal and regulatory compliance controls (collectively, *"Internal Controls")* that are sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets, (iii) access to assets is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Internal Controls are overseen by the audit committee (the *"Audit Committee")* of Parent's board of directors (the *"Board")* in accordance with the Exchange Act rules. Except as specified in Exhibit A, Parent does not reasonably expect to publicly disclose or report to the Audit Committee or the Board, a significant deficiency, material weakness, change in Internal Controls or fraud involving management or other employees who have a significant role in Internal Controls, any violation of, or failure to comply with, the Securities Laws, or any matter that, if determined adversely, would have or reasonably be expected to result, individually or in the aggregate, in a Material Adverse Change.

3.16 SEC Reporting. Parent is and will remain subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act and (i) has filed and will file all required reports under Section 13 or 15(d) of the Exchange Act, as applicable, other than Form 8-K reports; and (ii) has submitted and will submit electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T, during the 12 months preceding such sale.

3.17 SEC Filings; FINRA and the Sarbanes-Oxley Act. Parent has timely filed with or furnished to the Securities and Exchange Commission (the "SEC") each report, statement, schedule, form or other document or filing required to be filed or furnished (or otherwise filed or furnished) by Parent with the SEC from the date of its initial filing with the SEC to the Effective Date (all such documents collectively being the "SEC Documents"). Each SEC Document complied, and each SEC Document filed or furnished to the SEC subsequent to the Effective Date will comply, in all material respects with the applicable requirements of the Securities Act and the Exchange Act, and did not or will not contain any untrue statement of material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. Parent has and at all times will comply in all material respects with its obligations under FINRA and the Sarbanes-Oxley Act of 2002. Parent has provided PFG with a copy of any and all notices of material noncompliance and subsequent resulting written communications received from the SEC, FINRA and the NASDAQ, along with Parent's responses thereto.

3.18 No Injunctions. Neither Borrower nor any of its predecessors or affiliates has been subject to any order, judgment or decree of any court of competent jurisdiction temporarily, preliminarily or permanently enjoining such person for a failure to comply with Regulation D under the Securities Act and Borrower shall comply in all respects with Regulation D in connection with any future securities offerings made in reliance on Regulation D.

3.19 PFG Parent Stock

(a) The shares of Parent's common stock issuable on the Effective Date and on a monthly basis under this Agreement as set forth in Section 8(d) of the Schedule (the "PFG Parent Stock") have been duly and validly authorized for issuance on the Effective Date and each other date on which the PFG Parent Stock is required to be issued. The issuance of the PFG Parent Stock is not subject to preemptive or any similar rights of the stockholders of Parent (which have not been duly waived as at the Effective Date) or any liens or encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws and restrictions created by PFG. The PFG Parent Stock will be issued without any legends other than a customary Securities Act legend, until such time as it is removed pursuant to the provisions hereof.

(b) The capitalization table of Parent provided to PFG as part of the Representations is true, correct, accurate and complete as of the date hereof.

(c) No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any governmental authority or other person or entity is required on the part of Parent in connection with the execution, delivery and performance of this Agreement or the issuance, sale and delivery of the PFG Parent Stock, except (i) such filings as shall have been made prior to and shall be effective on and as of the date hereof, (ii) notice filings required pursuant to applicable state securities laws on or after the date hereof, and (iii) filings necessary to perfect security interests of PFG. All stockholder consents required in connection with the issuance of the PFG Parent Stock have either been obtained by Parent or no such consents are required.

(d) Assuming the accuracy of the representations and warranties of PFG contained in Exhibit C hereof, the offer, sale and issuance of the PFG Parent Stock is exempt from the registration requirements of the Securities Act pursuant to 506 of Regulation D under the Securities Act and from the registration and qualification requirements of applicable state securities laws. Neither the Company nor any agent on its behalf has solicited or will solicit any offers to sell or has offered to sell or will offer to sell all or any part of such securities to any person or persons so as to bring the sale and issuance of the PFG Parent Stock within the registration provisions of the Securities Act.

(e) Subject only to the proviso set forth in Section 4.13, Parent is and will remain subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act and (i) has filed and will file all required reports under Section 13 or 15(d) of the Exchange Act, as applicable, during the 12 months preceding the initial issuance of PFG Parent Stock, other than Form 8-K reports; and (ii) has submitted and will submit electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T, during the 12 months preceding such sale (a "Reporting Issuer").

(f) The PFG Parent Stock has been authorized for quotation on the NASDAQ Capital Select Market. Any filings required by such market, including, without limitation, the Financial Industry Regulatory Authority ("FINRA") shall be timely made and any required authorizations or approvals for the entry into this Agreement and the consummation of the transactions contemplated herein, including, without limitation, the issuance of the PFG Parent Stock, have been obtained.

(g) Unless required to do so by Special Request under Section 6 of the Schedule, Parent shall not at any time provide PFG with any material nonpublic information and will publicly disclose the terms of this Agreement on Form 8-K under the Exchange Act (including it as an exhibit thereto only if Parent deems it required under applicable law) promptly following the date hereof; provided, if applicable, that Parent makes no representation or warranty with respect to any information provided to Parent in writing pursuant to a Special Request.

(h) Parent has not and shall not pay any commission or other remuneration either directly or indirectly in connection with the PFG Parent Stock.

(j) Parent has not and shall not engage any placement agent, finder or broker dealer in connection with the offer and sale of the PFG Parent Stock.

(k) neither Parent nor any of its predecessors or affiliates has been subject to any order, judgment or decree of any court of competent jurisdiction temporarily, preliminarily or permanently enjoining such person for a failure to comply with Regulation D under the Securities Act and Parent shall comply in all respects with Regulation D in connection with any future securities offerings made in reliance on Regulation D.

(l) neither Parent nor any person acting on its behalf has used or will use any form of general solicitation or general advertising in connection with the offer or sale of the PFG Parent Stock.

(m) if all of the foregoing (a) through (l) and PFG's representations set forth in Exhibit C, are (and remain) true and correct, PFG will be entitled to sell the PFG Parent Stock in the ordinary course under Rule 144.

(n) The authorized capital of Borrower consists of 40,000,000 common shares, of which 9,594,203 are issued and outstanding, 1,000,000 Preferred Shares, no par value per share, of which 18,533.51 are issued and outstanding, of which (i) 250,000 are designated as Series A Preferred Shares and none are issued and outstanding, (ii) 10,000 are designated as Series B Preferred Shares and 9,997 are issued and outstanding, (iii) 3,500 are designated as Series C Preferred Shares and 3,424.65 are issued and outstanding (iv) 6,000 are designated as Series D Preferred Shares and 5,111.86 are issued and outstanding. Each share of preferred stock can convert into 100 shares of common. Common stock warrants totaling 1,093,071 have been granted in association with the Preferred Share purchases; an additional 2,643,631 of common stock warrants have been granted in association with other debt and equity financing. As of the date hereof, Borrower has reserved a total of 2,850,000 shares of its Common Stock for issuance under its 2005 Plan, of which 1,004,500 shares are reserved for issuance upon exercise of outstanding options. Borrower has also issued 100,000 common stock options outside of the 2005 that is outstanding. A capitalization table for Parent, true, correct, accurate and complete in all material respects is appended hereto as Exhibit D.

4. ADDITIONAL DUTIES OF BORROWER.

Borrower will at all times comply with all of the following covenants throughout the term of this Agreement:

4.1 Financial and Other Covenants. Borrower shall at all times comply with the financial and other covenants set forth in the Schedule.

4.2. Remittance of Proceeds. Subject to the rights of the Senior Lender, all proceeds arising from the disposition of any Collateral shall be delivered, in kind, by Borrower to PFG in the original form in which received by Borrower not later than the following Business Day after receipt by Borrower, to be applied to the Obligations in such order as PFG shall determine; provided that, if no Default or Event of Default has occurred and is continuing, Borrower shall not be obligated to remit to PFG (i) the proceeds of Accounts arising in the ordinary course of business, or (ii) the proceeds of the sale of surplus, worn out or obsolete Equipment disposed of by Borrower in good faith in an arm's length transaction for an aggregate purchase price of $25,000 or less (for all such transactions in any fiscal year). Borrower agrees that it will not commingle proceeds of Collateral (other than those described in subclauses (i) and (ii) above) with any of Borrower's other funds or property, but will hold such proceeds separate and apart from such other funds and property and in an express trust for PFG, except as set forth above, and subject to the rights of the Senior Lender. Subject to the rights of the Senior Lender, PFG may, in its good faith business judgment, require that all proceeds of Collateral be deposited by Borrower into a Lock-Box account, or such other "blocked account" as PFG may specify, pursuant to a blocked account agreement in such form as PFG may specify in its good faith business judgment. Nothing in this Section limits the restrictions on disposition of Collateral set forth elsewhere in this Agreement. Notwithstanding anything contained herein to the contrary, so long as no Default or Event of Default shall have occurred and be continuing (unless by reason of a conditional waiver or forbearance then being in effect between PFG and Borrower), Borrower shall not be required to deliver such proceeds to PFG in connection with any disposition so long as (x) Borrower reinvests all or any portion of such proceeds in assets used or useful in the business of Borrower, and (y) Borrower has notified PFG in advance of the intended reinvestment of such proceeds.

4.3 Insurance. Borrower shall at all times insure all of the tangible personal property Collateral and carry such other business insurance, with insurers reasonably acceptable to PFG, in such form and amounts as PFG may reasonably require and as are customary and in accordance with standard practices for Borrower's industry and locations, and Borrower shall provide evidence of such insurance to PFG. All such insurance policies shall have a lender's loss payable endorsement showing PFG as a lender loss payee, each in form and substance reasonably acceptable to PFG. Upon receipt of the proceeds of any such insurance, subject to the rights of the Senior Lender, PFG shall apply such proceeds in reduction of the Obligations as PFG shall determine in its good faith business judgment, except that, provided no Default or Event of Default has occurred and is continuing, PFG shall release to Borrower insurance proceeds with respect to Collateral totaling less than $100,000, which shall be utilized by Borrower for the replacement of the Collateral with respect to which the insurance proceeds were paid. PFG may require reasonable assurance that the insurance proceeds so released will be so used. If Borrower fails to provide or pay for any insurance, PFG may, but is not obligated to, obtain the same at Borrower's expense. Borrower shall promptly deliver to PFG copies of all material reports made to insurance companies. Notwithstanding anything contained herein to the contrary, so long as no Default or Event of Default shall have occurred and be continuing (unless by reason of a conditional waiver or forbearance then being in effect between PFG and Borrower), Borrower shall not be required to deliver such proceeds of such insurance to PFG so long as (x) Borrower reinvests all or any portion of such proceeds in assets used or useful in the business of Borrower, and (y) Borrower has notified PFG in advance of the intended reinvestment of such proceeds.

4.4 Reports. Borrower, at its expense, shall provide PFG with the written reports set forth in the Schedule, and such other written reports with respect to Borrower (including budgets, projections, operating plans and other financial documentation), as PFG shall from time to time specify in its good faith business judgment.

4.5 Access to Collateral, Books and Records; Additional Reporting and Notices. At reasonable times, and on three (3) Business Days" notice, PFG, or its agents, shall have the right to inspect the Collateral, and the right to audit and copy Borrower's books and records. The foregoing inspections and audits shall be at Borrower's expense and the charge therefor shall be $850 per person per day (or such higher amount as shall represent PFG's then current standard charge for the same), plus Lender Expenses, provided that so long as no Default or Event of Default has occurred and is then continuing and no inspection or audit within the one-year period prior to such inspection or audit has revealed material deficiencies or inaccuracies in Borrower's books and records, only one such inspection and audit shall be at Borrower's expense during any calendar year. Notwithstanding the foregoing, Borrower shall not be required to disclose to PFG any document or information (i) where disclosure is prohibited by applicable law, or (ii) is subject to attorney-client or similar privilege or constitutes attorney work product. If Borrower is withholding any information under the preceding sentence, it shall so advise PFG in writing, giving PFG a general description of the nature of the information withheld. Without limiting the scope of reporting under Section 6 of the Schedule, Borrower shall promptly disclose to PFG any efforts to sell Borrower, its business or assets or any material part thereof or to refinance the Loan and shall disclose the salient details of any offers received from time to time in respect of the foregoing. At any time when a Default or Event of Default has occurred and is continuing (whether or not PFG has agreed to forbear), PFG shall be entitled (i) to be briefed by the as to such matters as PFG may require in its business discretion, (ii) to receive advance notice of any and all Board meetings or written consents, together with the agendas for the foregoing, and (iii) to observe any such Board meetings, whether or not formally constituted as such; provided that, but subject to the next succeeding proviso, with respect to the rights contained in clauses (i) through (iii), Borrower may exclude confidential compensation information and any other information relating to this Agreement, any other Loan Document, or Borrower's relationship with the Senior Lender, PFG or any other lender, or any information Borrower reasonably believes may create a conflict of interest for PFG or affect the attorney/client or a similar privilege of any of Borrower and their legal advisors; provided further however, that Borrower's right to exclude information shall be subject to it providing PFG with a general description of the information excluded and the claimed basis for exclusion.

4.6 Negative Covenants. Except as may be permitted in the Schedule, Borrower shall not, without PFG's prior written consent (which shall be a matter of its good faith business judgment and shall be conditioned on Borrower then being in compliance with the terms of this Agreement), do any of the following:

(i) acquire any assets, except in the ordinary course of business, or make any Investments other than Permitted Investments;

(ii) enter into any transaction outside the ordinary course of business with a value in excess of $50,000 (which non-ordinary course transactions shall include mergers, amalgamations, consolidations in respect of any Borrower or other Group Member, provided that with not less than thirty (30) days' notice to PFG, one Borrower may merge with another Borrower and a Non-Borrower Subsidiary may merge with a Borrower or another Non-Borrower Subsidiary;

(iii) Transfer any Collateral (including without limitation the Transfer of Collateral which is then leased back by Borrower), except for (A) the sale of finished Inventory in the ordinary course of Borrower's business, (B) the sale or other disposal of worn-out, obsolete or unneeded Equipment in the ordinary course of business and otherwise in compliance with the terms of this Agreement, (C) the making of Permitted Investments, and (D) the granting of Permitted Liens; and, for the avoidance of any doubt, a Transfer of business or property, as contemplated above, would include (1) Borrower or any Subsidiary making or causing any payment to be made on Subordinated Debt unless expressly permitted under the terms of the subordination, intercreditor or other agreement to which the Subordinated Debt is subject (and, if permitted in this Agreement, only to the extent permitted), and (2) other than with the express consent of PFG in its sole business discretion, the amendment or modification of any such subordination, intercreditor or other agreement to provide for earlier or greater principal, interest or other payments thereon or adversely affect the subordination thereof to Obligations owed to PFG;

(iv) store any Inventory or other Collateral with any warehouseman or other third party with an aggregate value (per location) of $10,000 or greater, unless there is in place a bailee agreement in such form as PFG shall specify in its good faith business judgment between PFG and such warehouseman or other third party;

(v) sell any Inventory on a sale-or-return, guaranteed sale, consignment, or other contingent basis;

(vi) make any loans of any money or other assets, other than Permitted Investments;

(vii) incur or permit to exist any Indebtedness, other than Permitted Indebtedness;

(viii) guarantee or otherwise become liable with respect to the obligations of another party or entity;

(ix) pay or declare any Dividends (except for dividends payable solely in stock of Borrower);

(x) redeem, retire, purchase or otherwise acquire, directly or indirectly, any of Borrower's equity, except as required in the ordinary course of business and consistent with past practice in connection with redeeming or purchasing equity of departing employees, up to a maximum aggregate of $25,000 in any fiscal year; provided, however, that payment of a "put" purchase price to PFG in connection with any warrants held from time to time with Borrower shall not be limited by this clause;

(xi) engage, directly or indirectly, in any business other than the businesses currently engaged in by Borrower or reasonably related thereto;

(xii) with respect to Non-Borrower Subsidiaries, after the date hereof (A) cause or permit any Non-Borrower Subsidiary to hold Cash or Cash Equivalents with depositary institutions or otherwise of more than $10,000, or (B) cause or permit Borrower (in the aggregate) to make Permitted Investments in Non-Borrower Subsidiaries or incur Permitted Indebtedness to Non-Borrower Subsidiaries (in the aggregate) of more than $25,000 at any time;

(xiii) make or permit any payment on any Subordinated Debt, except under the terms of the subordination, intercreditor, or other similar agreement to which such Subordinated Debt is subject, or (b) amend any provision in any document relating to the Subordinated Debt which would increase the amount thereof, provide for earlier or greater principal, interest, or other payments thereon, or adversely affect the subordination thereof to Obligations owed to PFG;

(xiv) (A) without at least thirty (30) days prior written notice to PFG: (1) add any new offices or business locations, including warehouses (unless such new offices or business locations contain less than $10,000 in Borrower's assets or property), (2) change its jurisdiction of organization, (3) change its organizational structure or type, (4) change its legal name, (5) change any organizational number (if any) assigned by its jurisdiction of organization; or (6) form any new Subsidiaries, and in each case, subject to (x) Borrower's and such Subsidiary(ies) compliance with Section 4.9 hereof, (y) such Subsidiary(ies) compliance with Section 3.4(b), and (z) such Subsidiary(ies) compliance with Section 8(b) of the Schedule; or (B) fail to provide notice to PFG of any Key Person departing from or ceasing to be actively in the employ of Borrower within the earlier to occur of promptly after Knowledge thereof and (2) two days after such Key Person's departure from Borrower;

(xv) liquidate or dissolve, or elect or resolve to liquidate or dissolve; or

(xvi) the Board shall permit or shall resolve to or approve (unless such resolution or approval is expressly conditioned upon the prior consent of PFG), or Borrower shall otherwise take any affirmative steps to effect, any of the foregoing actions in clauses (i) through (xv), inclusive, which are not otherwise expressly permitted herein unless the result of such actions would result in a repayment of all Obligations in accordance with this Agreement.

Transactions permitted by the foregoing provisions of this Section are only permitted if no Default or Event of Default would occur as a result of such transaction.

4.7 Litigation Cooperation. Should any third-party suit or proceeding be instituted by or instituted or threatened in writing against PFG with respect to any Collateral or relating to Borrower, Borrower shall, without expense to PFG, make available Borrower and its officers, employees and agents and Borrower's books and records, to the extent that PFG may deem them reasonably necessary in order to prosecute or defend any such suit or proceeding.

4.8 Changes. When required under Section 6 of the Schedule, Borrower agrees to promptly notify PFG in writing of any changes in the information set forth in the Representations, provided that Borrower shall only be required to notify PFG of material changes to the Collateral value information set forth in Part A, Sections 3(d)(e) and (g), and to the information solicited in Sections 3(i), 4(b), 4(d), Part B, Sections 8-10, 11(d) and 14.

4.9 Further Assurances. Borrower agrees, at its expense, on reasonable request by PFG, to execute all documents and take all actions, as PFG, may, in its good faith business judgment, reasonably deem necessary in order to perfect and maintain PFG's perfected First-Priority security interest in the Collateral (subject to Permitted Liens), and in order to fully consummate the transactions contemplated by this Agreement, including without limitation, the joinder of any New Subsidiaries to this Agreement and execution of such other agreements and instruments as PFG reasonably request, including execution of a cross-corporate continuing guaranty among Borrowers and any Non-Borrower Subsidiaries. In addition, Borrower shall Deliver to PFG, within five (5) days after the same are sent or received, copies of all material correspondence, reports, documents and other filings with any Governmental Body regarding compliance with or maintenance of Governmental Authorizations or Legal Requirements or that could reasonably be expected to have a material adverse effect on any of the Governmental Authorizations or otherwise on the operations of Borrower or any of its Subsidiaries.

4.10 Collateral Accounts. Subject to Section 8(b) of the Schedule: (a) At all times thereafter, maintain all of its Collateral Accounts depositary institutions in respect of which a Control Agreement in favor of PFG is at all times in effect; and (b) provide PFG five (5) days prior written notice before establishing any Collateral Account at or with any bank or financial institution other than the Senior Lender.

4.11 Authorization to File Security Instruments. By executing and delivering a term sheet in respect of the Loans, Borrower shall be deemed to have authorized PFG to file Security Instruments on or prior to the Effective Date, without notice to Borrower, with all appropriate jurisdictions to perfect or protect PFG's interest or rights hereunder, including a notice that any disposition of the Collateral, by either Borrower or any other Person, shall be deemed to violate the rights of PFG under the Code. Such Security Instruments may indicate the Collateral as "all assets of the Debtor" or words of similar effect, or as being of an equal or lesser scope, or with greater detail, all in PFG's discretion.

4.12 Full Disclosure. No written representation, warranty or other statement of Borrower in any certificate or written statement given to PFG, as of the date such representation, warranty, or other statement was made, taken together with all such written certificates and written statements given to PFG, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or statements not misleading (it being recognized by PFG that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

4.13 Current Public Information. At all times during the term of this Agreement and so long as PFG beneficially owns any PFG Parent Stock, Parent shall be and remain a Reporting Issuer; provided, however, upon Parent's prior request, PFG will not unreasonably withhold its consent to a transaction that would otherwise (without PFG consent) violate Borrower's Obligations under Section 3.19(e), Section 4.14 and this Section 4.13, but that PFG determines in its good faith business judgment (a) is in the best interests of Borrower and (b) does not reflect adversely on (i) Borrower's business or its prospects, or (ii) the Collateral, the value thereof or PFG's Liens or the priority thereof.

4.14 Listing. Subject to the proviso set forth in Section 4.13, at all times during the term of this Agreement and so long as PFG beneficially owns any PFG Parent Stock, Parent shall cause the common stock to be authorized for quotation on the NASDAQ Capital Select Market or OTC on NASDAQ.

4.15 Legends. Parent shall remove any restrictive securities legends on the PFG Parent Stock six (6) months following each issuance of PFG Parent Stock. The foregoing six (6) month period shall commence on the date PFG is required to be issued under the terms of this Agreement, regardless of when in fact issued by Parent.

5. TERM.

5.1 Maturity Date. This Agreement shall continue in effect until the Maturity Date, subject to Sections 5.2, 5.3 and 5.4, below.

5.2 Early Termination. This Agreement may be terminated prior to the Maturity Date as follows: (i) if expressly permitted in the Schedule, by Borrower, effective three Business Days after written notice of termination is given to PFG and payment in full in cash of all Obligations (other than inchoate indemnity obligations); or (ii) by PFG at any time after the occurrence and during the continuance of an Event of Default, without notice, effective immediately. If a Borrower right to prepay Obligations is provided in the Schedule and the exercise of such right is subject to payment of any consideration to PFG as a condition to such exercise, a Borrower Default or Event of Default that results in an acceleration of Obligations and/or termination of this Agreement shall not relieve Borrower of the obligation to pay such consideration, which shall be included in the Obligations required to be paid or performed by Borrower.

5.3 Payment of Obligations. On the Maturity Date or on any earlier effective date of termination, Borrower shall pay and perform in full all Obligations, whether evidenced by installment notes or otherwise, and whether or not all or any part of such Obligations are otherwise then due and payable. Notwithstanding any termination of this Agreement, (i) all of PFG's security interests in all of the Collateral and all of the terms and provisions of this Agreement shall continue in full force and effect until all Obligations have been paid and performed in full, and (ii) no further Loans will be made to Borrower unless PFG otherwise agrees in its sole and absolute discretion. No termination shall in any way affect or impair any right or remedy of PFG, nor shall any such termination relieve Borrower of any Obligation to PFG, until all of the Obligations have been paid and performed in full. Upon payment and performance in full of all the Obligations and termination of this Agreement, PFG shall promptly terminate its financing statements with respect to Borrower and deliver to Borrower such other documents as may be required to fully terminate PFG's security interests.

5.4 Survival of Certain Obligations. Without limiting the survival of obligations addressed otherwise in this Agreement and notwithstanding any other provision of this Agreement, all covenants, representations and warranties made in this Agreement continue in full force until this Agreement has terminated pursuant to its terms and all Obligations (other than inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) have been paid in full and satisfied. The obligation of Borrower in Section 8.9 to indemnify PFG shall survive until the statute of limitations with respect to such claim or cause of action shall have run.

6. EVENTS OF DEFAULT AND REMEDIES.

6.1 Events of Default. The occurrence of any of the following events shall constitute an "Event of Default" under this Agreement regardless of whether notice thereof is given by PFG, and Borrower shall give PFG immediate written notice thereof:

(a) Borrower or any Guarantor or any Person acting for Borrower or any Guarantor makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to PFG or to induce PFG to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made; or

(b) Borrower shall fail to pay any Loan or any interest thereon or any other monetary Obligation when due; or

(c) Borrower (i) shall fail to comply with any of the financial covenants set forth in the Schedule, or (ii) shall breach any of the provisions of Section 4.6 hereof, or (iii) shall fail to perform any other non-monetary Obligation which by its nature cannot be cured, or (iv) shall fail to permit PFG to conduct an inspection or audit as provided in Section 4.5 hereof or shall fail to provide the notices, information, briefing and other rights set forth in Section 4.5, or (v) shall fail to provide PFG with a Report under Section 6 of the Schedule within three (3) Business Days after the date due; or

(d) Borrower shall fail to perform any non-monetary Obligation not otherwise addressed in this Section 6.1, or a default or breach shall occur under any other Loan Document (whether or not Borrower is a party), which failure, default or breach is not cured within ten (10) Business Days after the earlier of date performance is due and the date of such failure, default or breach, as the case may be (which cure period, for the avoidance of doubt, shall not apply to events set forth in this Agreement for which a cure period is otherwise specified); or

(e) any levy, assessment, attachment or seizure is made on all or any part of the Collateral which is not cured within five (5) Business Days after the occurrence of the same, or any lien or encumbrance (other than a Permitted Lien) is made on all or any part of the Collateral which is not cured within ten (10) Business Days after the occurrence of the same; or

(f) any default or event of default occurs under any obligation secured by a Permitted Lien, which is not cured within any applicable cure period or unconditionally waived in writing by the holder of the Permitted Lien (and for purposes of the foregoing, a waiver does not include a forbearance); or

(g) there is, under any agreement to which Borrower or any Guarantor is a party with a third party or parties, (i) any default resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount individually or in the aggregate in excess of $100,000; or (ii) any breach or default by Borrower or any Guarantor, the result of which could result in a Material Adverse Change; provided, however, for purposes of this Section 6.1(g) (only), any default or breach which would be reasonably likely to result in an overall adverse financial consequence of $600,000 or more shall be presumed to constitute a Material Adverse Change unless Borrower is able to demonstrate to PFG's reasonable satisfaction that such adverse financial consequence is not a Material Adverse Change; or

(h) (i) dissolution, termination of existence, insolvency or business failure of Borrower or any Guarantor; or (ii) appointment of a receiver, trustee or custodian, for all or any part of the property of, assignment for the benefit of creditors by, or the commencement of any Insolvency Proceeding by, against or in respect of Borrower or any Guarantor under any reorganization, bankruptcy, insolvency, arrangement, readjustment of debt, dissolution or liquidation law or statute of any jurisdiction, now or in the future in effect, in each above case that is not dismissed or stayed within 45 days (and for the avoidance of doubt, PFG shall have no obligation to advance any Loan while any of the foregoing conditions or those set forth in clauses (iii) and (iv), below, exist); or (iii) Borrower or any Guarantor shall generally not pay its debts as they become due; or (iv) Borrower or any Guarantor shall conceal, remove or Transfer any part of its property, with intent to hinder, delay or defraud its creditors, or make or suffer any Transfer of any of its property which may be fraudulent under any bankruptcy, fraudulent conveyance or similar law; or

(i) revocation or termination of, or limitation or denial of liability upon, any guaranty of the Obligations or any attempt to do any of the foregoing, or commencement of proceedings by any guarantor of any of the Obligations under any bankruptcy or insolvency law; or

(j) revocation or termination of, or limitation or denial of liability upon, any pledge of any certificate of deposit, securities or other property or asset of any kind pledged by any third party to secure any or all of the Obligations, or any attempt to do any of the foregoing, or commencement of proceedings by or against any such third party under any bankruptcy or insolvency law; or

(k) Borrower makes any payment on account of any indebtedness or obligation which has been subordinated to the Obligations (other than as permitted in the applicable subordination agreement), or if any Person who has subordinated such indebtedness or obligations terminates or in any way limits his subordination agreement; or

(l) Borrower shall (i) enter into any agreement, binding or non-binding, that would result in a Change in Control, or (ii) effect or suffer a Change in Control; or

(m) a default or breach shall occur under any other Loan Document, which default or breach shall be continuing after the later of cure period expressly specified in such Loan Document or five (5) Business Days; or

(n) Parent shall fail to timely issue PFG Parent Stock when due or to comply with Sections 4.13, 4.14, or 4.15 (without any grace or cure period); or

(o) a Material Adverse Change shall occur.

PFG may cease making any Loans hereunder during any of the cure periods provided above, and thereafter if an Event of Default has occurred and is continuing.

6.2 Remedies. Upon the occurrence and during the continuance of any Event of Default, and at any time thereafter, PFG, at its option, and without notice or demand of any kind (all of which are hereby expressly waived by Borrower), may, subject to the rights of the Senior Lender, do any one or more of the following: (a) Cease making Loans or otherwise extending credit to Borrower under this Agreement or any other Loan Document; (b) Accelerate and declare all or any part of the Obligations to be immediately due, payable, and performable, notwithstanding any deferred or installment payments allowed by any instrument evidencing or relating to any Obligation; (c) Take possession of any or all of the Collateral wherever it may be found, and for that purpose Borrower hereby authorizes PFG without judicial process to enter onto any of Borrower's premises without interference to search for, take possession of, keep, store, or remove any of the Collateral, and remain on the premises or cause a custodian to remain on the premises in exclusive control thereof, without charge for so long as PFG deems it necessary, in its good faith business judgment, in order to complete the enforcement of its rights under this Agreement or any other agreement; provided, however, that should PFG seek to take possession of any of the Collateral by court process, Borrower hereby irrevocably waives: (i) any bond and any surety or security relating thereto required by any statute, court rule or otherwise as an incident to such possession; (ii) any demand for possession prior to the commencement of any suit or action to recover possession thereof; and (iii) any requirement that PFG retain possession of, and not dispose of, any such Collateral until after trial or final judgment; (d) Require Borrower to assemble any or all of the Collateral and make it available to PFG at places designated by PFG which are reasonably convenient to PFG and Borrower, and to remove the Collateral to such locations as PFG may deem advisable; (e) Complete the processing, manufacturing or repair of any Collateral prior to a disposition thereof and, for such purpose and for the purpose of removal, PFG shall have the right to use Borrower's premises, vehicles, hoists, lifts, cranes, and other Equipment and all other property without charge; (f) Sell, lease or otherwise dispose of any of the Collateral, in its condition at the time PFG obtains possession of it or after further manufacturing, processing or repair, at one or more public and/or private sales, in lots or in bulk, for cash, exchange or other property, or on credit, and to adjourn any such sale from time to time without notice other than oral announcement at the time scheduled for sale. PFG shall have the right to conduct such disposition on Borrower's premises without charge, for such time or times as PFG deems reasonable, or on PFG's premises, or elsewhere and the Collateral need not be located at the place of disposition. PFG may directly or through any affiliated company purchase or lease any Collateral at any such public disposition, and if permissible under applicable law, at any private disposition. Any sale or other disposition of Collateral shall not relieve Borrower of any liability Borrower may have if any Collateral is defective as to title or physical condition or otherwise at the time of sale; (g) Demand payment of, and collect any Accounts and General Intangibles comprising Collateral and, in connection therewith, Borrower irrevocably authorizes PFG to endorse or sign Borrower's name on all collections, receipts, instruments and other documents, to take possession of and open mail addressed to Borrower and remove therefrom payments made with respect to any item of the Collateral or proceeds thereof, and, in PFG's good faith business judgment, to grant extensions of time to pay, compromise claims and settle Accounts and the like for less than face value; (h) Exercise any and all rights under any present or future Control Agreements relating to Deposit Accounts or Investment Property; and (i) Demand and receive possession of any of Borrower's federal and state income tax returns and the books and records utilized in the preparation thereof or referring thereto. All Lender Expenses, liabilities and obligations incurred by PFG with respect to the foregoing shall be added to and

become part of the Obligations, shall be due on demand, and shall bear interest at a rate equal to the highest interest rate applicable to any of the Obligations. Without limiting any of PFG's rights and remedies, from and after the occurrence and during the continuance of any Event of Default, the interest rate applicable to the Obligations shall be the Default Rate.

6.3 Standards for Determining Commercial Reasonableness. Borrower and PFG agree that a sale or other disposition (collectively, "sale") of any Collateral which complies with the following standards will conclusively be deemed to be commercially reasonable: (i) Notice of the sale is given to Borrower at least ten days prior to the sale, and, in the case of a public sale, notice of the sale is published at least five days before the sale in a newspaper of general circulation in the county where the sale is to be conducted; (ii) Notice of the sale describes the collateral in general, non-specific terms; (iii) The sale is conducted at a place designated by PFG, with or without the Collateral being present; (iv) The sale commences at any time between 8:00 a.m. and 6:00 p.m.; (v) Payment of the purchase price in cash or by cashier's check or wire transfer is required; (vi) With respect to any sale of any of the Collateral, PFG may (but is not obligated to) direct any prospective purchaser to ascertain directly from Borrower any and all information concerning the same. PFG shall be free to employ other methods of noticing and selling the Collateral, in its discretion, if they are commercially reasonable. Without limiting the foregoing, if Exigent Circumstances exist, Borrower and PFG agree that notice periods may be shorter than as set forth above and such shorter notice periods are commercially reasonable in Exigent Circumstances. Borrower further acknowledges and agrees that if PFG's or third parties' access to Collateral is inhibited, restricted or denied, it shall be commercially reasonable for PFG to conduct a sale of Collateral under such circumstances even though the lack of access to Collateral would likely give rise to a sale price less than if parties had unfettered access to Collateral for purposes of conducting a sale.

6.4 Power of Attorney. Upon the occurrence and during the continuance of any Event of Default, without limiting PFG's other rights and remedies, Borrower grants to PFG an irrevocable power of attorney coupled with an interest, authorizing and permitting PFG (acting through any of its employees, attorneys or agents) at any time, at its option, but without obligation, with or without notice to Borrower, and at Borrower's expense, to do any or all of the following, in Borrower's name or otherwise, but PFG agrees that if it exercises any right hereunder, it will do so in good faith and in a commercially reasonable manner: (a) Execute on behalf of Borrower any documents that PFG may, in its good faith business judgment, deem advisable in order to perfect and maintain PFG's security interest in the Collateral, or in order to exercise a right of Borrower or PFG, or in order to fully consummate all the transactions contemplated under this Agreement, and all other Loan Documents; (b) Execute on behalf of Borrower, any invoices relating to any Account, any draft against any Account Debtor and any notice to any Account Debtor, any proof of claim in bankruptcy, any Notice of Lien, claim of mechanic's, materialman's or other lien, or assignment or satisfaction of mechanic's, materialman's or other lien; (c) Take control in any manner of any cash or non-cash items of payment or proceeds of Collateral; endorse the name of Borrower upon any instruments, or documents, evidence of payment or Collateral that may come into PFG's possession; (d) Endorse all checks and other forms of remittances received by PFG; (e) Pay, contest or settle any lien, charge, encumbrance, security interest and adverse claim in or to any of the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; (f) Grant extensions of time to pay, compromise claims and settle Accounts and General Intangibles for less than face value and execute all releases and other documents in connection therewith; (g) Pay any sums required on account of Borrower's taxes or to secure the release of any liens therefor, or both; (h) Settle and adjust, and give releases of, any insurance claim that relates to any of the Collateral and obtain payment therefor; (i) Instruct any third party having custody or control of any books or records belonging to, or relating to, Borrower to give PFG the same rights of access and other rights with respect thereto as PFG has under this Agreement; (j) Execute on behalf of Borrower and file in Borrower's name such documents and instruments as may be necessary or appropriate to effect the Transfer of Domain Rights, domain names, domain registry administrative contacts and domain and website hosting services into the name of PFG or its designees, and (k) Take any action or pay any sum required of Borrower pursuant to this Agreement and any other Loan Documents. Any and all Lender Expenses incurred by PFG with respect to the foregoing shall be added to and become part of the Obligations, shall be payable on demand, and shall bear interest at a rate equal to the highest interest rate applicable to any of the Obligations. In no event shall PFG's rights under the foregoing power of attorney or any of PFG's other rights under this Agreement be deemed to indicate that PFG is in control of the business, management or properties of Borrower.

6.5 Application of Proceeds. All proceeds realized as the result of any sale of the Collateral shall be applied by PFG first to Lender Expenses incurred by PFG in the exercise of its rights under this Agreement, second to the interest due upon any of the Obligations, and third to the principal of the Obligations, in such order as PFG shall determine in its sole discretion. Any surplus shall be paid to Borrower or other persons legally entitled thereto; Borrower shall remain liable to PFG for any deficiency. If, PFG, in its good faith business judgment, directly or indirectly enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, PFG shall have the option, exercisable at any time, in its good faith business judgment, of either reducing the Obligations by the principal amount of purchase price or deferring the reduction of the Obligations until the actual receipt by PFG of the cash therefor.

6.6 Remedies Cumulative. In addition to the rights and remedies set forth in this Agreement, PFG shall have all the other rights and remedies accorded a secured party under the Code and under all other applicable laws, and under any other instrument or agreement now or in the future entered into between PFG and Borrower, and all of such rights and remedies are cumulative and none is exclusive. Exercise or partial exercise by PFG of one or more of its rights or remedies shall not be deemed an election, nor bar PFG from subsequent exercise or partial exercise of any other rights or remedies. The failure or delay of PFG to exercise any rights or remedies shall not operate as a waiver thereof, but all rights and remedies shall continue in full force and effect until all of the Obligations have been fully paid and performed.

7. DEFINITIONS. AS USED IN THIS AGREEMENT, THE FOLLOWING TERMS HAVE THE FOLLOWING MEANINGS:

"Account Debtor" means the obligor on an Account.

"Accounts" means all present and future "accounts" as defined in the Code in effect on the Effective Date with such additions to such term as may hereafter be made, and includes without limitation all accounts receivable, healthcare receivables and other sums owing to Borrower.

"Affiliate" means, with respect to any Person, a relative, partner, shareholder, director, officer, or employee of such Person, or any parent or Subsidiary of such Person, or any Person directly or indirectly through any other Person controlling, controlled by or under common control with such Person.

"Billing Period" means monthly, unless another period or date for payment is specified under this Agreement (such as the Maturity Date), or (ii) such other period as PFG as may result from monetary Obligations not being outstanding during the entire period for which interest is being calculated (such as partial months if the Effective Date is not the first day of a calendar month), or (iii) such other period as PFG may notify in writing to Borrower. For the avoidance of doubt, under this Agreement, a "month" consists of 31 days in each January, March, May, July, August, October and December, 30 days in each other month except February, which consists of 28 days or, in a leap year, 29 days.

"Board" means the Board of Directors or other governing authority of Borrower as authorized in its Constitutional Documents.

"Business Day" or "business day" means a day on which PFG is open for business.

"Cash" means unrestricted and unencumbered (except for the Liens of PFG and the Senior Lender) cash or cash equivalents in Deposit Accounts or other Collateral Accounts for which there is in effect a Control Agreement among Borrower, PFG and the depositary institution in respect of such accounts, unless the requirement for a Control Agreement has been waived by PFG.

"Cash Equivalents" means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one (1) year from the date of acquisition; (b) commercial paper maturing no more than one (1) year after its creation and having a rating of at least A-1 or the equivalent thereof by Standard & Poor's Ratings Group or a rating of P-1 or the equivalent thereof by Moody's Investors Service, Inc.; (c) certificates of deposit held with the Senior Lender maturing no more than one (1) year after the date of acquisition, and overnight bank deposits, in each case which are issued by a commercial bank organized under the laws of the United States or any state thereof, having capital and surplus in excess of $500,000,000; and (d) money market funds at least ninety-five percent (95%) of the assets of which constitute Cash Equivalents of the kinds described in clauses (a) through (c) of this definition and (e) Investments pursuant to Borrower's Investment Policy, provided that such investment policy (and any such amendment thereto) has been provided by Borrower to PFG and approved in writing by PFG.

"Change in Control" means any event, transaction, or occurrence as a result of which (a) any "person" (as such term is defined in Sections 3(a)(9) and 13(d)(3) of the Securities Exchange Act of 1934, as an amended (the "Exchange Act")), other than a trustee or other fiduciary holding securities under an employee benefit plan of Borrower, is or becomes a beneficial owner (within the meaning Rule 13d-3 promulgated under the Exchange Act), directly or indirectly, of securities of Borrower, representing thirty-five percent (35%) or more of the combined voting power of Borrower's then outstanding securities in a single transaction or a series of related transactions (other than by the sale of Borrower's equity securities in a public offering or to venture capital or private equity investors so long as Borrower identifies to PFG the venture capital or private equity investors at least seven (7) Business Days prior to the initial closing of the transaction and provides to PFG a description of the material terms of the transaction and such other information as PFG may reasonably request); or (b) during any period of twelve consecutive calendar months, individuals who at the beginning of such period constituted the Board of Borrower (together with any new directors whose election by the Board of Borrower was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of such period or whose election or nomination for election was previously so approved) cease for any reason other than death or disability to constitute a majority of the directors then in office (other than as a result of the above-referenced venture capital / private equity exception, subject to the same notice and information requirements as specified above).

"Code" means the Uniform Commercial Code as adopted and in effect in the State of California from time to time.

"Collateral" has the meaning set forth in Section 2 above.

"Collateral Account" is any Deposit Account.

"Compliance Certificate" means Borrower's certification of its compliance with the terms and conditions of this Agreement and such other matters as PFG may require to be addressed in such certificate, in the form as initially set forth as Exhibit B hereto, as such form may be amended from time to time upon advance notice from PFG.

"Constitutional Document" means for any Person, such Person's formation documents, as last certified by the Secretary of State (or equivalent Governmental Body) of such Person's jurisdiction of organization, together with, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or operating or similar agreement), (c) if such Person is a partnership, its partnership agreement (or similar agreement), and (d) if such Person is a statutory joint venture company or similar entity, its joint venture (or similar) agreement, each of the foregoing with all current amendments or modifications thereto.

"Contingent Obligation" is, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, Dividend, letter of credit or other obligation of another such as an obligation, in each case directly or indirectly guaranteed, endorsed, co made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but "Contingent Obligation" does not include endorsements in the ordinary course of business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

"continuing" and "during the continuance of" when used with reference to a Default or Event of Default means that the Default or Event of Default has occurred and has not been either waived in writing by PFG or cured within any applicable cure period.

"Control Agreement" means a written agreement among PFG, Borrower and a depositary bank or other custodian in respect of Borrower's Collateral Accounts by which the depositary bank or other custodian, as appropriate, agrees to comply with instructions given from time to time by PFG directing the disposition of the funds, investments and securities in Borrower's Collateral Accounts without further consent of Borrower, which instructions may include not complying with instructions (which term may include the honoring of checks written by Borrower against funds in said accounts) given by Borrower, and containing other terms acceptable to PFG.

"Current Depositary(ies)" means the banking and / or other financial institutions at which Borrower maintains Collateral Accounts on the Effective Date.

"Default" means any event which with notice or passage of time or both, would constitute an Event of Default.

"Default Rate" means the lesser of (i) the applicable rate(s) set forth in the Schedule, plus six percent (6%) per annum, and (ii) the maximum rate of interest that may lawfully be charged to a commercial borrower under applicable usury laws.

"Deposit Accounts" means all present and future "deposit accounts" as defined in the Code in effect on the Effective Date with such additions to such term as may hereafter be made, and includes without limitation all general and special bank accounts, demand accounts, checking accounts, savings accounts and certificates of deposit, and as used in this Agreement, the term "Deposit Accounts" shall be construed to also include securities, commodities and other Investment Property accounts.

"Dividend" means a payment or other distribution in respect to equity to an owner thereof, (A) whether or not (i) in respect of net profits or otherwise, (ii) declared by Borrower's (or other relevant party's) (iii) Board, previously paid, or (iv) authorized in its Constitutional Documents or otherwise, and (B) for the avoidance of doubt, includes distributions to members of a limited liability company.

"Due Date" in relation to monetary Obligations payable from time to time by Borrower means (i) the date for payment specified in this Agreement (such as, on the first day of each calendar month for interest accrued during the prior month, as contemplated in Section 1.2) or in any other writing executed and delivered by PFG and Borrower from time to time, whether such payment is recurring, one-time or otherwise, or (ii) in the case of Obligations for which no date for payment is specified in this Agreement and which cannot be reasonably ascertained without an invoice from PFG, such as reimbursement of Lender Expenses, the date for payment specified in an invoice sent by or on behalf of PFG to Borrower.

"Equipment" means all present and future "equipment" as defined in the Code in effect on the Effective Date with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

"Event of Default" means any of the events set forth in Section 6.1 of this Agreement.

"Exigent Circumstances" means circumstances that substantially inhibit an orderly sale process or that imply urgency due to rapid erosion of value or opportunity, including Borrower closing its business or "going dark", inability or refusal (express or implied by non-response) to provide for the security of Collateral.

"Financial Statements" means consolidated financial statements of Borrower, including a balance sheet, income statement and cash flow and, in the case of monthly-required financial statements, showing data for the month being reported and a history showing each month from the beginning of the relevant fiscal year.

"First-Priority" means, in relation to PFG's Lien in Collateral, a security interest that is prior to any other security interest, with the exception of the Liens of the Senior Lender and other Permitted Liens, which other Permitted Liens may only have superior priority to PFG's Lien as expressly specified herein or pursuant to the terms of a subordination agreement between PFG and the holder of such other Permitted Lien.

"GAAP" means generally accepted accounting principles consistently applied.

"General Intangibles" means all present and future "general intangibles" as defined in the Code in effect on the Effective Date with such additions to such term as may hereafter be made, and includes without limitation all Intellectual Property, payment intangibles, royalties, contract rights, goodwill, franchise agreements, purchase orders, customer lists, route lists, telephone numbers, domain names, claims, income tax refunds, security and other deposits, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including without limitation key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

"good faith business judgment" means honesty in fact and good faith (as defined in Section 1201 of the Code) in the exercise of PFG's business judgment.

"Governmental Authorization" means any: (a) permit, license, certificate, franchise, concession, approval, consent, ratification, permission, clearance, confirmation, endorsement, waiver, certification, designation, rating, registration, qualification or authorization that is, has been issued, granted, given or otherwise made available by or under the authority of any Governmental Body or pursuant to any Legal Requirement; or (b) right under any Contract with any Governmental Body.

"Governmental Body" means any: (a) nation, principality, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) local, municipal, foreign or other government; (c) governmental or quasi-governmental authority of any nature (including any governmental division, subdivision, department, agency, bureau, branch, office, commission, council, board, instrumentality, officer, official, representative, organization, unit, body or entity and any court or other tribunal); (d) multi-national organization or body; or (e) individual, entity or body exercising, or entitled to exercise, any executive, legislative, judicial, administrative, regulatory, police, military or taxing authority or power of any nature.

"Group" means Borrower and all direct and indirect Subsidiaries and affiliated Persons under the direct or indirect control of Borrower, and "Group Member" means any of such foregoing Persons.

"including" means including (but not limited to).

"Indebtedness" means (a) indebtedness for borrowed money or the deferred purchase price of property or services (other than trade payables arising in the ordinary course of business), (b) obligations evidenced by bonds, notes, debentures or other similar instruments, (c) reimbursement obligations in connection with letters of credit, (d) capital lease obligations and (e) Contingent Obligations.

"Insolvency Proceeding" is any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law in any jurisdiction, including assignments for the benefit of creditors, compositions, receiverships, administrations, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"Intellectual Property" means all present and future: (a) copyrights, copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished, (b) trade secret rights, including all rights to unpatented inventions and know-how, and confidential information; (c) mask work or similar rights available for the protection of semiconductor chips; (d) patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same; (e) trademarks, servicemarks, trade styles, and trade names, whether or not any of the foregoing are registered, and all applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by any such trademarks; (f) Domain Rights as described in Section 3.14 hereof, (g) computer software and computer software products; (h) designs and design rights; (i) technology; (j) all claims for damages by way of past, present and future infringement of any of the rights included above; and (k) all licenses or other rights to use any property or rights of a type described above.

"Inventory" means all present and future "inventory" as defined in the Code in effect on the Effective Date with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of Borrower's custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

"Investment" means any beneficial ownership interest in any Person (including any stock, partnership interest or other equity or debt securities issued by any Person), and any loan, advance or capital contribution to any Person.

"Investment Property" means all present and future investment property, securities, stocks, bonds, debentures, debt securities, partnership interests, limited liability company interests, options, security entitlements, securities accounts, commodity contracts, commodity accounts, and all financial assets held in any securities account or otherwise, and all options and warrants to purchase any of the foregoing, wherever located, and all other securities of every kind, whether certificated or uncertificated.

"Knowledge" or "best of knowledge" and words of similar import mean either (i) the actual knowledge of any of Borrower's officers, including its Directors, any Chief Executive Officer, President, designated legal representative under the Legal Requirements of any non-U.S. jurisdiction, Chief Information Officer (if any), Chief Technology Officer (or equivalent), Chief Financial Officer and Corporate Controller, or Borrower's Vice Presidents or General Managers supervising a business unit or division, or any persons succeeding or performing the responsibilities of such identified positions including Directors with executive authority, or (ii) such knowledge as the persons in such identified positions would have assuming (A) Borrower policies in accordance with generally-accepted norms of corporate governance and (B) the actual exercise of reasonable diligence and prudence by such persons in accordance with such policies.

"Legal Requirement" means any written local, municipal, foreign or other law, statute, legislation, constitution, principle of common law, resolution, ordinance, code, edict, decree, proclamation, treaty, convention, rule, regulation, ruling, directive, pronouncement, requirement, specification, determination, decision, opinion or interpretation that is, has been issued, enacted, adopted, passed, approved, promulgated, made, implemented or otherwise put into effect by or under the authority of any Governmental Body.

"Lender Expenses" means, in each case without limitation as to type and kind: reasonable Professional Costs, and all filing, recording, search, title insurance, appraisal, audit, and other reasonable costs incurred by PFG, pursuant to, or in connection with, or relating to this Agreement (whether or not a lawsuit is filed), including, but not limited to, Professional Costs PFG pays or incurs in order to do the following: (i) prepare and negotiate this Agreement and all present and future documents relating to this Agreement; (ii) obtain legal advice in connection with this Agreement or Borrower; enforce, or seek to enforce, any of its rights or retain the services of consultants to do so; (iii) prosecute actions against, or defend actions by, Account Debtors; (iv) commence, intervene in, or defend any action or proceeding; (v) initiate any complaint to be relieved of the automatic stay in bankruptcy; (vi) file or prosecute any probate claim, bankruptcy claim, third-party claim, or other claim; (vii) examine, audit, copy, and inspect any of the Collateral or any of Borrower's books and records, subject to Section 4.5; (viii) protect, obtain possession of, lease, dispose of, or otherwise enforce PFG's security interest in, the Collateral; and (ix) otherwise represent PFG in any litigation relating to Borrower.

"Lien" or "lien" is a security interest, claim, mortgage, deed of trust, levy, charge, pledge or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

"Loan Documents" means, collectively, this Agreement, the Representations, and all other present and future documents, instruments and agreements between PFG and Borrower, including, but not limited to those relating to this Agreement, and all amendments and modifications thereto and replacements therefor.

"Loan Request" means any request that may be made by a Borrower in connection with this Agreement, including a borrowing request, consent request, a waiver request and any other accommodation that may be given by PFG under or relating to the Loan Agreement.

"Material Adverse Change" means any of the following: (i) a material adverse change in the business, operations, or condition (financial or otherwise) of Borrower or any Guarantor, or (ii) a material impairment of the prospect of repayment of any portion of the Obligations; or (iii) a material impairment of the perfection or priority of PFG's Liens in the Collateral.

"MSI Bonded Inventory" means inventory held in bonded storage that is not reflected in the Financial Statements of Borrower and that is made available to Borrower's customers as spare and repair parts.

"Maturity Date" means the Maturity Date specified in Section 4 of the Schedule, or such earlier date at which Obligations become due by acceleration, prepayment or otherwise.

"Net Income" means, as calculated on a consolidated basis for Borrower and its Subsidiaries for any period as at any date of determination, the net profit (or loss), after provision for taxes, of Borrower and its Subsidiaries for such period taken as a single accounting period; provided, however, for purposes of Section 3 of the Schedule, the amount of non-cash charges related to incentive compensation arrangement approved by the Board and reflected in Net Income may be added back for purposes of such Section 3 of the Schedule.

"New Subsidiary(ies)" means any person that becomes a Subsidiary of Borrower after the date hereof.

"New Subsidiary(ies)" means any person that becomes a Subsidiary of Borrower after the date hereof.

"Non-Borrower Subsidiary(ies)" means any direct or indirect Subsidiary of Borrower not joined as a co-Borrower hereunder and otherwise joined to the Loan Documents.

"Non-Overdue Senior Monetary Obligations" means, at any time, the amount of monetary Obligations other than principal Indebtedness owed by Borrower to the Senior Lender but not then due, such as accrued and unpaid interest not yet due.

"Obligations" means all present and future Loans, advances, debts, liabilities, obligations, guaranties, covenants, duties and indebtedness at any time owing by Borrower to PFG, including obligations and covenants intended to survive the termination of this Agreement, whether evidenced by this Agreement or any note or other instrument or document, or otherwise, including indebtedness under any obligation to purchase equity derivatives (including stock warrants) purchased or otherwise issued to PFG from time to time, whether arising from an extension of credit, opening of a letter of credit, banker's acceptance, loan, guaranty, indemnification or otherwise, whether direct or indirect (including, without limitation, those acquired by assignment and any participation by PFG in Borrower's debts owing to others), absolute or contingent, due or to become due, including, without limitation, all interest (including deferred interest due upon Maturity), charges, expenses, fees, attorney's fees, expert witness fees, audit fees, collateral monitoring fees, closing fees, facility fees, termination fees, minimum interest charges and any other sums chargeable to Borrower under this Agreement or under any other Loan Documents.

"Ordinary (or "ordinary") course of business" and derivatives shall apply to an action taken or an action required to be taken and not taken by or on behalf of a Borrower. An action will not be deemed to have been taken in the "ordinary course of business" *unless*: (a) such action is consistent with its past practices (if such type of action has been taken in the past and, if not, such action shall be deemed not in the ordinary course of business) and is similar in nature and magnitude to actions customarily taken by it; (b) such action is taken in accordance with sound and prudent business practices in its jurisdiction of organization; and (c) such action is not required to be authorized by its shareholders and does not require any other separate or special authorization of any nature.

"Other Property" means the following as defined in the Code in effect on the Effective Date with such additions to such terms as may hereafter be made, and all rights relating thereto: all present and future "commercial tort claims" (including without limitation any commercial tort claims identified in the Representations), "documents", "instruments", "promissory notes", "chattel paper", "letters of credit", "letter-of-credit rights", "fixtures", "farm products" and "money"; and all other goods and personal property of every kind, tangible and intangible, whether or not governed by the Code.

"Parent" means Borrower, Giga-tronics Incorporated, a California corporation.

"Payment" means all checks, wire transfers and other items of payment received by PFG for credit to Borrower's outstanding Obligations.

"Permitted Indebtedness" means:

(i) the Loans and other Obligations;

(ii) Indebtedness existing on the Effective Date and shown on Exhibit A hereto;

(iii) Subordinated Debt;

(iv) Indebtedness owing to Senior Lender not to exceed the Senior Debt Limit specified in the Schedule;

(v) other Indebtedness secured by Permitted Liens described in clauses (i), (ii), (iii), (v), (vi), (vii), (viii) and (ix) of that definition;

(vi) unsecured Indebtedness to trade creditors incurred in the ordinary course of business (for purposes of clarification, the permission under this clause (vi) shall include trade payables for the deferred purchase price of property or services incurred in the ordinary course of business);

(vii) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (i) through (vi) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose materially more burdensome terms upon Borrower;

(viii) Indebtedness of up to $100,000 outstanding at any time secured by a Lien described in clause (i) of Permitted Liens; provided such Indebtedness does not exceed the lesser of the cost or fair market value of the property financed with such Indebtedness; and

(ix) reimbursement obligations in respect of letters of credit in an aggregate face amount outstanding not to exceed $300,000 at any time outstanding, which have been reported to PFG in writing, and, in the case of reimbursement obligations to the Senior Lender in respect of letters of credit which do not exceed the Senior Debt Limit (taking into account all other Indebtedness to Senior Lender).

"Permitted Investments" are:

(i) Investments (if any) shown on Exhibit A and existing on the Effective Date;

(ii) Investments consisting of Cash Equivalents;

(iii) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of Borrower;

(iv) Investments in Subsidiaries existing on the Effective Date.

"Permitted Liens" means the following:

(i) purchase money Liens (including Liens arising under any retention of title, hire purchase or conditional sales arrangement or arrangements having similar effect) (i) on Equipment acquired or held by Borrower incurred for financing the acquisition of the Equipment securing no more than $100,000 in the aggregate amount outstanding, or (ii) existing on Equipment when acquired, if the Lien is confined to the property and improvements and the proceeds of the Equipment;

(ii) Liens for Taxes not yet payable;

(iii) additional Liens consented to in writing by PFG, which consent may be withheld in its good faith business judgment. PFG shall have the right to require, as a condition to its consent under this subparagraph (iii), that the holder of the additional security interest or lien sign a subordination agreement in PFG's then standard form, acknowledge that the security interest is subordinate to the security interest in favor of PFG, and agree not to take any action to enforce its subordinate security interest so long as any Obligations remain outstanding, and that Borrower agrees that any uncured default in any obligation secured by the subordinate security interest shall also constitute an Event of Default under this Agreement;

(iv) Liens being terminated substantially concurrently with this Agreement;

(v) Liens of materialmen, mechanics, warehousemen, carriers, or other similar liens arising in the ordinary course of business and securing obligations which are not delinquent;

(vi) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);

(vii) Liens incurred in connection with the extension, renewal or refinancing of the indebtedness secured by liens of the type described above in clauses (i), (ii), (iii) and (ix), provided that any extension, renewal or replacement lien is limited to the property encumbered by the existing lien and the principal amount of the indebtedness being extended, renewed or refinanced does not increase and other terms are not less favorable to Borrower;

(viii) Liens in favor of customs and revenue authorities which secure payment of customs duties in connection with the importation of goods;

(ix) non-exclusive licenses of Intellectual Property granted to third parties in the ordinary course of business; and

(x) Liens in favor of Senior Lender securing an amount not in excess of the Senior Debt Limit.

"Person" means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, government, or any agency or political division thereof, or any other entity.

"PFG Parent Stock" means the Parent common stock to be issued to PFG at the Effective Date and during the term of the Loan as specified in Section 8(d) of the Schedule.

"Plan" means Borrower's Board-approved financial plan as presented to PFG on March 22, 2017 in Excel format in the file entitled "PFG_20170324 Operating Plan Presented.xlsx" for the Borrower's fiscal year ending March 30, 2018.

"Professional Costs" means all reasonable fees and expenses of auditors, accountants, valuation experts, Collateral disposition service providers, restructuring and other advisory services in connection with restructurings, workouts and Insolvency Proceedings, and fees and costs of attorneys.

"Qualifying Request" means a request made by a Responsible Officer of Borrower under Section 1.4 for (i) a Loan (A) that is within Borrower's borrowing availability under this Agreement, (B) that satisfies the relevant conditions set forth in this Agreement (including the Schedule), (C) that is accompanied by such certificates, documents and instruments as may be required under this Agreement or otherwise reasonably required by PFG to confirm Borrower's compliance with the Loan Documents at the time of such request, and (D) that is made within 30 days of the date the Reporting package is required to be delivered (as specified in Section 6 of the Schedule) showing satisfaction of the relevant borrowing conditions, or (ii) any other matter for which PFG's consent is required under the Loan Documents.

"Representations" means the written Representations and Warranties provided by Borrower to PFG referred to in the Schedule.

"Responsible Officer(s)" means William J. Thompson and John Regazzi, and any other person authorized to bind Borrower and notified to PFG in writing by a Responsible Officer as a new Responsible Officer.

"Restricted License" means any material license or other agreement with respect to which Borrower is the licensee (a) that prohibits or otherwise restricts Borrower from granting a security interest in Borrower's interest in such license or agreement or any other property, or (b) for which a default under or termination of could interfere with PFG's right to sell any Collateral.

"Security Instruments" means financing statements and similar notices filed under the Code or other relevant local law (U.S. or non-U.S.) in any jurisdiction in which such financing statements may be filed, fixed and floating charges, share charges, mortgage debentures, and any other notices, instruments and filings that reflect the "all assets" security granted to PFG by Borrower in this Agreement and the other Loan Documents.

"Senior Debt" has the meaning set forth in Section 8 of the Schedule.

"Senior Lender" has the meaning set forth in Section 8 of the Schedule.

"Subordinated Debt" means debt incurred by Borrower subordinated to Borrower's debt to PFG pursuant to a subordination agreement entered into between PFG, Borrower and the subordinated creditor(s) upon terms acceptable to PFG in its sole business discretion, but which may at PFG's option include: (i) subordination of subordinated creditor Lens, (ii) restrictions or prohibition of payments on subordinated debt until all Obligations to PFG are fully repaid and performed, and (iii) a prohibition on the exercise of remedies by a subordinated creditor until all Obligations to PFG are fully repaid and performed.

"Subordination Agreement" means that certain Subordination Agreement, dated as of the date hereof, by and between PFG and Senior Lender.

"Subsidiary" means, with respect to any Person, (i) any Person of which more than 50% of the voting stock or other equity interests is owned or (ii) a Person controlled, directly or indirectly, by such Person or one or more Affiliates of such Person and which, for the avoidance of doubt, shall include a "sister" company to a Person under common direct or indirect ownership meeting the above specified percentage for being considered a "Subsidiary".

"Tax" means any tax (including any income tax, franchise tax, capital gains tax, estimated tax, gross receipts tax, value-added tax, surtax, excise tax, ad valorem tax, transfer tax, stamp tax, sales tax, use tax, property tax, business tax, occupation tax, inventory tax, occupancy tax, withholding tax or payroll tax), levy, assessment, tariff, impost, imposition, toll, duty (including any customs duty), deficiency or fee, and any related charge or amount (including any fine, penalty or interest), that is, has been or may in the future be (a) imposed, assessed or collected by or under the authority of any Governmental Body, or (b) payable pursuant to any tax-sharing agreement or similar contract.

"Tax Return" means any return (including any information return), report, statement, declaration, estimate, schedule, notice, notification, form, election, certificate or other document or information that is, has been or may in the future be filed with or submitted to, or required to be filed with or submitted to, any Governmental Body in connection with the determination, assessment, collection or payment of any Tax or in connection with the administration, implementation or enforcement of or compliance with any Legal Requirement relating to any Tax.

"Transfer" or "transfer" shall include any sale, assignment with or without consideration, encumbrance, hypothecation, pledge, or other transfer or disposition of any kind, including, but not limited to, transfers to receivers, levying creditors, trustees or receivers in bankruptcy proceedings or general assignees for the benefit of creditors, whether voluntary or by operation of law, directly or indirectly.

Other Terms. All accounting terms used in this Agreement, unless otherwise indicated, shall have the meanings given to such terms in accordance with GAAP, consistently applied. All other terms contained in this Agreement, unless otherwise indicated, shall have the meanings provided by the Code, to the extent such terms are defined therein.

8. GENERAL PROVISIONS.

***8.1 Confidentiality*.** PFG agrees to use the same degree of care that it exercises with respect to its own proprietary information, to maintain the confidentiality of any and all proprietary, trade secret or confidential information provided to or received by PFG from Borrower prior to and after the Effective Date, which (i) indicates that it is confidential, including business plans and forecasts, non-public financial information, confidential or secret processes, formulae, devices and contractual information, customer lists, and employee relation matters, or (ii) by its very nature should reasonably be understood as confidential; provided, however, in each case of (i) and (ii) above, such information shall actually be treated by Borrower and by policy and conduct of Borrower within its business as confidential and provided, further, that PFG may disclose such information (A) to its officers, directors, employees, attorneys, accountants, affiliates, advisory boards, participants, prospective participants, assignees and prospective assignees, and such other Persons to whom PFG shall at any time be required to make such disclosure in accordance with applicable law or legal process, provided that with respect to voluntary disclosees, such persons shall be subject to confidentiality obligations that reasonably protect against the disclosure of such information, and (B) in its good faith business judgment in connection with the enforcement of its rights or remedies after an Event of Default, or in connection with any dispute with Borrower or any other Person relating to Borrower. The confidentiality agreement in this Section supersedes any prior confidentiality agreement of PFG relating to Borrower.

8.2 Interest Computation. In computing interest on the Obligations, all Payments received after 12:00 Noon, Pacific Time, on any day shall be deemed received on the next Business Day.

8.3 Payments. All Payments may be applied, and in PFG's good faith business judgment reversed and re-applied, to the Obligations, in such order and manner as PFG shall determine in its good faith business judgment.

8.4 Monthly Accountings. PFG may provide Borrower monthly with an account of advances, charges, expenses and payments made pursuant to this Agreement. Such account shall be deemed correct, accurate and binding on Borrower and an account stated (except for reverses and reapplications of payments made and corrections of errors discovered by PFG), unless Borrower notifies PFG in writing to the contrary within 60 days after such account is rendered, describing the nature of any alleged errors or omissions.

8.5 Notices. All notices to be given under this Agreement shall be in writing and shall be given either personally, or by reputable private delivery service, or by regular first-class mail, or certified mail return receipt requested, or by fax to the most recent fax number a party has for the other party (and if by fax, sent concurrently by one of the other methods provided herein), or by electronic mail to the most recent electronic mail address for Borrower provided for the chief financial officer or financial controller executing the Representations (and if by electronic mail, with an electronic delivery and/or read receipt), addressed to PFG or Borrower at the addresses shown in the heading to this Agreement, in the Representations or at any other address designated in writing by one party to the other party. All notices shall be deemed to have been given upon delivery in the case of notices personally delivered, or at the expiration of one Business Day following delivery to the private delivery service, or two Business Days following the deposit thereof in the United States mail, with postage prepaid, or on the first business day of receipt during business hours in the case of notices sent by fax or electronic mail, as provided herein.

8.6 Authorization to Use Borrower Name, Etc. Borrower irrevocably authorizes PFG to: (i) use Borrower's logo on PFG's website and in its marketing materials to denote the lending relationship between PFG and Borrower; (ii) use a "tombstone" to highlight the transaction(s) from time to time between PFG and Borrower; and (iii) to issue press releases in a form reasonable acceptable to Borrower and PFG highlighting and summarizing the credit facilities extended by PFG to Borrower from time to time under this Agreement, as amended from time to time, all of the above (i) through (iii), for marketing purposes.

8.7 Severability. Should any provision of this Agreement be held by any court of competent jurisdiction to be void or unenforceable, such defect shall not affect the remainder of this Agreement, which shall continue in full force and effect.

8.8 Integration. This Agreement and such other written agreements, documents and instruments as may be executed in connection herewith are the final, entire and complete agreement between Borrower and PFG and supersede all prior and contemporaneous negotiations and oral representations and agreements, all of which are merged and integrated in this Agreement. There are no oral understandings, representations or agreements between the parties which are not set forth in this Agreement or in other written agreements signed by the parties in connection herewith.

8.9 Waivers; Indemnity. The failure of PFG at any time or times to require Borrower to strictly comply with any of the provisions of this Agreement or any other Loan Document shall not waive or diminish any right of PFG later to demand and receive strict compliance therewith. Any waiver of any default shall not waive or affect any other default, whether prior or subsequent, and whether or not similar. None of the provisions of this Agreement or any other Loan Document shall be deemed to have been waived by any act or knowledge of PFG or its agents or employees, but only by a specific written waiver signed by an authorized officer of PFG and delivered to Borrower. Borrower waives the benefit of all statutes of limitations relating to any of the Obligations or this Agreement or any other Loan Document, and Borrower waives demand, protest, notice of protest and notice of default or dishonor, notice of payment and nonpayment, release, compromise, settlement, extension or renewal of any commercial paper, instrument, account, General Intangible, document or guaranty at any time held by PFG on which Borrower is or may in any way be liable, and notice of any action taken by PFG, unless expressly required by this Agreement. Borrower hereby agrees to indemnify PFG and its affiliates, subsidiaries, parent, directors, officers, employees, agents, and attorneys, and to hold them harmless from and against any and all claims, debts, liabilities, demands, obligations, actions, causes of action, penalties and Lender Expenses of every kind, which they may sustain or incur based upon or arising out of any of the Obligations, or any relationship or agreement between PFG and Borrower, or any other matter, relating to Borrower or the Obligations; provided that this indemnity shall not extend to any indemnified costs, expenses or damages determined by a court of competent jurisdiction in a final judgment to have been proximately caused by the indemnitee's own gross negligence or willful misconduct. Notwithstanding any provision in this Agreement to the contrary, the indemnity agreement set forth in this Section shall survive any termination of this Agreement and shall for all purposes continue in full force and effect.

8.10 No Liability for Ordinary Negligence. Borrower agrees that any and all claims it may have under this Agreement shall be limited to claims against PFG and not its directors, officers, employees, agents, attorneys or any other Person affiliated with or representing PFG. Neither PFG, nor any of its directors, officers, employees, agents, attorneys or any other Person affiliated with or representing PFG shall be liable for any claims, demands, losses or damages, of any kind whatsoever, made, claimed, incurred or suffered by Borrower or any other party through the negligence of PFG, or any of its directors, officers, employees, agents, attorneys or any other Person affiliated with or representing PFG, but nothing herein shall relieve PFG from liability for its own willful misconduct.

8.11 Amendment. The terms and provisions of this Agreement may not be waived or amended, except in a writing executed by Borrower and a duly authorized officer of PFG. No purported amendment or modification of any Loan Document, or waiver, discharge or termination of any obligation under any Loan Document, shall be enforceable or admissible unless, and only to the extent, expressly set forth in a writing signed by the party against which enforcement or admission is sought. Without limiting the generality of the foregoing, no oral promise or statement, nor any action, inaction, delay, failure to require performance or course of conduct shall operate as, or evidence, an amendment, supplement or waiver or have any other effect on any Loan Document. Any waiver granted shall be limited to the specific circumstance expressly described in it, and shall not apply to any subsequent or other circumstance, whether similar or dissimilar, or give rise to, or evidence, any obligation or commitment to grant any further waiver.

8.12 Time of Essence. Time is of the essence in the performance by Borrower of each and every obligation under this Agreement.

8.13 Lender Expenses. Borrower shall reimburse PFG for all Lender Expenses. All Lender Expenses to which PFG may be entitled pursuant to this Paragraph shall immediately become part of Borrower's Obligations, shall be due on demand, and if not paid within two (2) Business Days after demand, shall bear interest at a rate equal to the highest interest rate applicable to any of the Obligations.

8.14 Benefit of Agreement. The provisions of this Agreement shall be binding upon and inure to the benefit of the respective successors, assigns, heirs, beneficiaries and representatives of Borrower and PFG; provided, however, that Borrower may not assign or Transfer any of its rights under this Agreement without the prior written consent of PFG, and any prohibited assignment shall be void. No consent by PFG to any assignment shall release Borrower from its liability for the Obligations.

8.15 Joint and Several Liability. If Borrower consists of more than one Person, their liability shall be joint and several, and the compromise of any claim with, or the release of, any Borrower shall not constitute a compromise with, or a release of, any other Borrower.

8.16 Limitation of Actions. Any claim or cause of action by Borrower against PFG, its directors, officers, employees, agents, accountants or attorneys, based upon, arising from, or relating to this Loan Agreement, or any other Loan Document, or any other transaction contemplated hereby or thereby or relating hereto or thereto, or any other matter, cause or thing whatsoever, incurred, done, omitted or suffered to be done by PFG, its directors, officers, employees, agents, accountants or attorneys, shall be barred unless asserted by Borrower by the commencement of an action or proceeding in a court of competent jurisdiction by (a) the filing of a complaint within one year after the earlier to occur of (i) the first act, occurrence or omission upon which such claim or cause of action, or any part thereof, is based, or (ii) the date this Agreement is terminated, and (b) the service of a summons and complaint on an officer of PFG, or on any other person authorized to accept service on behalf of PFG, within thirty (30) days thereafter. Borrower agrees that such one-year period is a reasonable and sufficient time for Borrower to investigate and act upon any such claim or cause of action. The one-year period provided herein shall not be waived, tolled, or extended except by the written consent of PFG in its sole discretion. This provision shall survive any termination of this Loan Agreement or any other Loan Document.

8.17 Loan Monitoring. At reasonable times and upon reasonable advance notice to Borrower, PFG shall have the right to visit personally with Borrower up to two times per calendar year at its principal place of business or such other location as the parties may mutually agree, for the purpose of meeting with Borrower's management in order to remain as up-to-date with Borrower's business as is practicable and to maintain best practices in terms of lender loan monitoring and diligence.

8.18 Paragraph Headings; Construction; Counterparts. Paragraph headings are only used in this Agreement for convenience. Borrower and PFG acknowledge that the headings may not describe completely the subject matter of the applicable paragraph, and the headings shall not be used in any manner to construe, limit, define or interpret any term or provision of this Agreement. This Agreement has been fully reviewed and negotiated between the parties with the benefit of independent counsel and no uncertainty or ambiguity in any term or provision of this Agreement shall be construed strictly against PFG or Borrower under any rule of construction or otherwise. References to "Borrower" are construed to mean "each Borrower", unless otherwise expressly specified. Amounts set off in brackets or parentheses are negative. The word "shall" is mandatory, the word "may" is permissive, and the word "or" is not exclusive. The term "Agreement" includes the Schedule. and (if not otherwise specified) any amendment, modification, restatement or other writing amending the terms of this Agreement. Obligations of a similar nature addressed in different sections of this Agreement shall be deemed supplemental to one another and not exclusive unless expressly set forth as such. Words and phrases expressing examples, including "for example" and "such as" are non-exclusive. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement.

8.19 Correction of Loan Documents. PFG may correct patent errors and fill in any blanks in the Loan Documents consistent with the agreement of the parties so long as PFG provides Borrowers with written notice of such correction and allows Borrower at least ten (10) days to object to such correction. In the event of such objection, such correction shall not be made except by an amendment signed by both PFG and Borrower.

8.20 Governing Law; Jurisdiction; Venue. This Agreement and all acts and transactions hereunder and all rights and obligations of PFG and Borrower shall be governed by the laws of the State of California. As a material part of the consideration to PFG to enter into this Agreement, Borrower (i) agrees that all actions and proceedings relating directly or indirectly to this Agreement shall be litigated in courts located within California and that the exclusive venue therefor shall, at PFG's option, be Santa Clara County; (ii) consents to the jurisdiction and venue of any such court and consents to service of process in any such action or proceeding by personal delivery or by internationally-recognized commercial courier or overnight delivery service or by certified mail, return receipt requested, to the last known address for Borrower; and (iii) waives any and all rights Borrower may have to object to the jurisdiction of any such court, or to transfer or change the venue of any such action or proceeding. Notwithstanding the foregoing, PFG, in pursuit of collection and Collateral or rights therein, may pursue remedies in any jurisdiction in which Borrower or any Collateral resides or is deemed to reside.

8.21 Withholding. Payments received by PFG from Borrower under this Agreement will be made free and clear of and without deduction for any and all present or future taxes, levies, imposts, duties, deductions, withholdings, assessments, fees or other charges imposed by any Governmental Body (including any interest, additions to tax or penalties applicable thereto). Specifically, however, if at any time any Governmental Body, applicable law, regulation or international agreement requires Borrower to make any withholding or deduction from any such payment or other sum payable hereunder to PFG, Borrower hereby covenants and agrees that the amount due from Borrower with respect to such payment or other sum payable hereunder will be increased to the extent necessary to ensure that, after the making of such required withholding or deduction, PFG receives a net sum equal to the sum which it would have received had no withholding or deduction been required, and Borrower shall pay the full amount withheld or deducted to the relevant Governmental Body. Borrower will, upon request, furnish PFG with proof reasonably satisfactory to PFG indicating that Borrower has made such withholding payment; provided, however, that Borrower need not make any withholding payment if the amount or validity of such withholding payment is contested in good faith by appropriate and timely proceedings and as to which payment in full is bonded or reserved against by Borrower. The agreements and obligations of Borrower contained in this Section 8.21 shall survive the termination of this Agreement.

8.22 Multiple Borrowers; Suretyship Waivers.

(a) Borrowers' Agent. Each Borrower hereby irrevocably appoints each other Borrower, as the agent, attorney-in-fact and legal representative of all Borrowers for all purposes, including requesting disbursement of the Loan and receiving account statements and other notices and communications to Borrowers (or any of them) from PFG. PFG may rely, and shall be fully protected in relying, on any request for a Loan, disbursement instruction, report, information or any other notice or communication made or given by any Borrower, whether in its own name, as Borrowers' agent, or on behalf of one or more Borrowers, and PFG shall not have any obligation to make any inquiry or request any confirmation from or on behalf of any other Borrower as to the binding effect on it of any such request, instruction, report, information, other notice or communication, nor shall the joint and several character of Borrowers' obligations hereunder be affected thereby.

(b) Waivers. Each Borrower hereby waives: (i) any right to require PFG to institute suit against, or to exhaust its rights and remedies against, any other Borrower or any other Person, or to proceed against any property of any kind which secures all or any part of the Obligations, or to exercise any right of offset or other right with respect to any reserves, credits or deposit accounts held by or maintained with PFG or any indebtedness of PFG to any other Borrower, or to exercise any other right or power, or pursue any other remedy PFG may have; (ii) any defense arising by reason of any disability or other defense of any other Borrower or any guarantor or any endorser, co-maker or other Person, or by reason of the cessation from any cause whatsoever of any liability of any other Borrower or any guarantor or any endorser, co-maker or other Person, with respect to all or any part of the Obligations, or by reason of any act or omission of PFG or others which directly or indirectly results in the discharge or release of any other Borrower or any guarantor or any other Person or any Obligations or any security therefor, whether by operation of law or otherwise; (iii) any defense arising by reason of any failure of PFG to obtain, perfect, maintain or keep in force any Lien on, any property of any Borrower or any other Person; (iv) any defense based upon or arising out of any Insolvency Proceeding, liquidation or dissolution proceeding commenced by or against or in respect of any Borrower or any guarantor or any endorser, co-maker or other Person, including without limitation any discharge of, or bar against collecting, any of the Obligations (including without limitation any interest thereon), in or as a result of any such proceeding. Until all of the Obligations have been paid, performed, and discharged in full, nothing shall discharge or satisfy the liability of Borrower hereunder except the full performance and payment of all of the Obligations. If any claim is ever made upon PFG for repayment or recovery of any amount or amounts received by PFG in payment of or on account of any of the Obligations, because of any claim that any such payment constituted a preferential Transfer or fraudulent conveyance, or for any other reason whatsoever, and PFG repays all or part of said amount by reason of any judgment, decree or order of any court or administrative body having jurisdiction over PFG or any of its property, or by reason of any settlement or compromise of any such claim effected by PFG with any such claimant (including without limitation the any other Borrower), then and in any such event, Borrower agrees that any such judgment, decree, order, settlement and compromise shall be binding upon Borrower, notwithstanding any revocation or release of this Agreement or the cancellation of any note or other instrument evidencing any of the Obligations, or any release of any of the Obligations, and Borrower shall be and remain liable to PFG under this Agreement for the amount so repaid or recovered, to the same extent as if such amount had never originally been received by PFG, and the provisions of this sentence shall survive, and continue in effect, notwithstanding any revocation or release of this Agreement. Each Borrower hereby expressly and unconditionally waives all rights of subrogation, reimbursement and indemnity of every kind against any other Borrower, and all rights of recourse to any assets or property of any other Borrower, and all rights to any collateral or security held for the payment and performance of any Obligations, including (but not limited to) any of the foregoing rights which Borrower may have under any present or future document or agreement with any other Borrower or other Person, and including (but not limited to) any of the foregoing rights which Borrower may have under any equitable doctrine of subrogation, implied contract, or unjust enrichment, or any other equitable or legal doctrine. Each Borrower further hereby waives any other rights and defenses that are or may become available to Borrower by reason of California Civil Code Sections 2787 to 2855 (inclusive), 2899, and 3433, as now in effect or hereafter amended, and under all other similar statutes and rules now or hereafter in effect.

(c) Consents. Each Borrower hereby consents and agrees that, without notice to or by Borrower and without affecting or impairing in any way the obligations or liability of Borrower hereunder, PFG may, from time to time before or after revocation of this Agreement, do any one or more of the following in PFG's sole and absolute discretion: (i) accept partial payments of, compromise or settle, renew, extend the time for the payment, discharge, or performance of, refuse to enforce, and release all or any parties to, any or all of the Obligations; (ii) grant any other indulgence to any Borrower or any other Person in respect of any or all of the Obligations or any other matter; (iii) accept, release, waive, surrender, enforce, exchange, modify, impair, or extend the time for the performance, discharge, or payment of, any and all property of any kind securing any or all of the Obligations or any guaranty of any or all of the Obligations, or on which PFG at any time may have a Lien, or refuse to enforce its rights or make any compromise or settlement or agreement therefor in respect of any or all of such property; (iv) substitute or add, or take any action or omit to take any action which results in the release of, any one or more other Borrowers or any endorsers or guarantors of all or any part of the Obligations, including, without limitation one or more parties to this Agreement, regardless of any destruction or impairment of any right of contribution or other right of Borrower; (v) apply any sums received from any other Borrower, any guarantor, endorser, or co-signer, or from the disposition of any Collateral or security, to any indebtedness whatsoever owing from such Person or secured by such Collateral or security, in such manner and order as PFG determines in its sole discretion, and regardless of whether such indebtedness is part of the Obligations, is secured, or is due and payable. Borrower consents and agrees that PFG shall be under no obligation to marshal any assets in favor of Borrower, or against or in payment of any or all of the Obligations. Borrower further consents and agrees that PFG shall have no duties or responsibilities whatsoever with respect to any property securing any or all of the Obligations. Without limiting the generality of the foregoing, PFG shall have no obligation to monitor, verify, audit, examine, or obtain or maintain any insurance with respect to, any property securing any or all of the Obligations.

(d) Independent Liability. Each Borrower hereby agrees that one or more successive or concurrent actions may be brought hereon against Borrower, in the same action in which any other Borrower may be sued or in separate actions, as often as deemed advisable by PFG. Each Borrower is fully aware of the financial condition of each other Borrower and is executing and delivering this Agreement based solely upon its own independent investigation of all matters pertinent hereto, and Borrower is not relying in any manner upon any representation or statement of PFG with respect thereto. Each Borrower represents and warrants that it is in a position to obtain, and each Borrower hereby assumes full responsibility for obtaining, any additional information concerning any other Borrower's financial condition and any other matter pertinent hereto as Borrower may desire, and Borrower is not relying upon or expecting PFG to furnish to it any information now or hereafter in PFG's possession concerning the same or any other matter.

(e) Subordination. All indebtedness of a Borrower now or hereafter arising held by another Borrower is subordinated to the Obligations and Borrower holding the indebtedness shall take all actions reasonably requested by PFG to effect, to enforce and to give notice of such subordination.

8.23 Electronic Execution of Documents. The words "execution," "signed," "signature" and words of like import in any Loan Document shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act.

8.24 Relationship. The relationship of the parties to this Agreement is determined solely by the provisions of this Agreement. The parties do not intend to create any agency, partnership, joint venture, trust, fiduciary or other relationship with duties or incidents different from those of parties to an arm's-length contract.

8.25 Third Parties. Nothing in this Agreement, whether express or implied, is intended to: (a) confer any benefits, rights or remedies under or by reason of this Agreement on any persons other than the express parties to it and their respective permitted successors and assigns; (b) relieve or discharge the obligation or liability of any person not an express party to this Agreement; or (c) give any person not an express party to this Agreement any right of subrogation or action against any party to this Agreement.

8.26 Mutual Waiver of Jury Trial. **Borrower and PFG each hereby waive the right to trial by jury in any action or proceeding based upon, arising out of, or in any way relating to, this Agreement or any other present or future instrument or agreement between PFG and Borrower, or any conduct, acts or omissions of PFG or Borrower or any of their directors, officers, employees, agents, attorneys or any other persons affiliated with PFG or Borrower, in all of the foregoing cases, whether sounding in contract or tort or otherwise. WITHOUT INTENDING IN ANY WAY TO LIMIT THE PARTIES ' AGREEMENT TO WAIVE THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY** , if the above waiver of the right to a trial by jury is not enforceable, the parties hereto agree that any and all disputes or controversies of any nature between them arising at any time shall be decided by a reference to a private judge, mutually selected by the parties (or, if they cannot agree, by the Presiding Judge of the Santa Clara County, California Superior Court) appointed in accordance with Code of Civil Procedure Section 638 (or pursuant to comparable provisions of federal law if the dispute falls within the exclusive jurisdiction of the federal courts), sitting without a jury, in Santa Clara County, California; and the parties hereby submit to the jurisdiction of such court. The reference proceedings shall be conducted pursuant to and in accordance with the provisions of Code of Civil Procedure §§ 638 through 645.1, inclusive. The private judge shall have the power, among others, to grant provisional relief, including without limitation, entering temporary restraining orders, issuing preliminary and permanent injunctions and appointing receivers. All such proceedings shall be closed to the public and confidential and all records relating thereto shall be permanently sealed. If during the course of any dispute, PFG desires to seek provisional relief, but a judge has not been appointed at that point pursuant to the judicial reference procedures, then PFG may apply to the Santa Clara County, California Superior Court for such relief. The proceeding before the private judge shall be conducted in the same manner as it would be before a court under the rules of evidence applicable to judicial proceedings. The parties shall be entitled to discovery which shall be conducted in the same manner as it would be before a court under the rules of discovery applicable to judicial proceedings. The private judge shall oversee discovery and may enforce all discovery rules and order applicable to judicial proceedings in the same manner as a trial court judge. The parties agree that the selected or appointed private judge shall have the power to decide all issues in the action or proceeding, whether of fact or of law, and shall report a statement of decision thereon pursuant to the Code of Civil Procedure § 644(a). Nothing in this paragraph shall limit the right of PFG at any time to exercise self-help remedies, foreclose against Collateral, or obtain provisional remedies. The private judge shall also determine all issues relating to the applicability, interpretation, and enforceability of this paragraph.

[Signature Page Follows]

Borrower:
GIGA-TRONICS INCORPORATED

By_____
Acting Chief Executive Officer

By_____
Chief Financial Officer or Secretary

MICROSOURCE, INC.

By_____
Acting Chief Executive Officer

By_____
Chief Financial Officer or Secretary

PFG:
PARTNERS FOR GROWTH V, L.P.

By_____

Name: _____

Title: Manager, Partners for Growth V, LLC
Its General Partner

Exhibit 10.22

INVESTOR RIGHTS AGREEMENT

This Investor Rights Agreement (this "*Agreement*") is made and entered into as of January 15, 2016, by and among Giga-tronics Incorporated, a corporation organized in the State of California (the "*Company*"), and the purchaser identified on the signature page hereto (the "*Purchaser*").

This Agreement is made pursuant to the Securities Purchase Agreement, dated as of January 15, 2016, between the Company and the Purchaser, relating to the purchase of Units consisting of shares of Common Stock and Warrants (the "*Purchase Agreement*").

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Company and the Purchaser agree as follows:

1. Definitions. As used in this Agreement, the following terms shall have the following meanings:

"Affiliate" means, with respect to any Person, any other Person that, directly or indirectly through one or more intermediaries, controls, is controlled by or is under common control with such Person, as such terms are used in and construed under Rule 405 under the Securities Act; provided, however, that notwithstanding the foregoing, as used herein, the Purchaser shall not be deemed an Affiliate of the Company or any Subsidiary, and none of the Company and its Subsidiaries shall be deemed an Affiliate of the Purchaser.

"*Agreement"* has the meaning set forth in the preamble.

"*Blue Sky Filing*" has the meaning set forth in Section 6(a).

"Business Day" means any day other than Saturday, Sunday or any other day on which commercial banks in the State of California or City of New York are authorized or required by law to remain closed.

"*Claims*" has the meaning set forth in Section 6(a).

"Commission" means the United States Securities and Exchange Commission.

"Common Shares" means those shares of the Common Stock issued to the Purchaser by the Company under the Purchase Agreement and those shares of Common Stock issuable upon exercise of the Warrants issued by the Company to the Purchaser pursuant to the Purchase Agreement.

"*Common Stock*" means the Company's common stock, no par value.

"Company" has the meaning set forth in the preamble and includes the Company's successors by merger, acquisition, reorganization or otherwise.

"*Company Indemnified Party*" has the meaning set forth in Section 6(b).

"Effective Date" means the date a Registration Statement is declared effective by the Commission.

"Effectiveness Deadline" means the date that is 60 days after the date of the Filing Deadline or, if the Commission staff reviews or provides comments on the applicable Registration Statement, 90 days after the date of the Filing Deadline.

"*Exchange Act*" means the Securities Exchange Act of 1934, as amended, or any successor statute, and the rules and regulations promulgated thereunder.

"*Filing Deadline*" means the date that is 45 days after the Closing Date under the Purchase Agreement.

"*Grace Period*" has the meaning set forth in Section 3(j).

"*Indemnified Damages*" has the meaning set forth in Section 6(a).

"Initial Registration Statement" has the meaning set forth in Section 2(a).

"*Legal Counsel*" has the meaning set forth in Section 3(c).

"New Registration Statement" has the meaning set forth in Section 2(a).

"Person" means an individual, corporation, partnership, limited liability company, trust, business trust, incorporated or unincorporated association, joint stock company, joint venture, sole proprietorship, government (or an agency or subdivision thereof), governmental authority or other entity of any kind.

"*Prospectus*" means the prospectus included in a Registration Statement, as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Registrable Securities covered by a Registration Statement, and all other amendments and supplements to the Prospectus, including post-effective amendments, and all material incorporated by reference or deemed to be incorporated by reference in such Prospectus.

"*Purchase Agreement*" has the meaning set forth in the recitals.

"Purchaser" has the meaning set forth in the preamble and includes any transferee or assignee thereof to whom the Purchaser assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 8 and any transferee or assignee thereof to whom a transferee or assignee assigns its rights under this Agreement and who agrees to become bound by the provisions of this Agreement in accordance with Section 8.

"*Purchaser Indemnified Party*" has the meaning set forth in Section 6(a).

"register," "registered," and "registration" refer to a registration effected by preparing and filing one or more Registration Statements (as defined below) in compliance with the Securities Act and pursuant to Rule 415 and the declaration or ordering of effectiveness of such Registration Statement(s) by the Commission.

"Registrable Securities" means all of the Common Shares and any securities issued or distributed or issuable in respect thereof by way of a stock split, dividend or other distribution or in connection with a combination of shares, recapitalization, merger consolidation or other reorganization or similar event with respect to the Common Shares; provided, that Common Shares shall cease to be Registrable Securities upon the earliest to occur of the following: (A) a sale pursuant to a Registration Statement or Rule 144 (in which case, only such security sold shall cease to be a Registrable Security); (B) if such Common Shares have ceased to be outstanding; or (C) if such Common Shares have been sold in a private transaction in which the Purchaser's rights under this Agreement have not been assigned to the transferee.

"*Registration Period*" has the meaning set forth in Section 3(a).

"Registration Statement" means a registration statement or registration statements of the Company filed under the Securities Act covering the Registrable Securities.

"Required Holders" means the holders of at least 50% of the Registrable Securities.

"Rule 144" means Rule 144 under the Securities Act as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

"Rule 415" means Rule 415 under the Securities Act as such Rule may be amended from time to time, or any successor rule providing for offering securities on a continuous or delayed basis.

"Rule 424" means Rule 424 under the Securities Act as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

"*SEC Guidance*" means any publicly-available written or oral guidance, comments, requirements or requests of the Commission staff.

"*Securities Act*" means the Securities Act of 1933, as amended, or any successor statute, and the rules and regulations promulgated thereunder.

"*Selling Expenses*" means all underwriting discounts, selling commissions and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any holder of Registrable Securities, except for the fees and disbursements of counsel for the holders of Registrable Securities required to be paid by the Company pursuant to Section 5.

"*Suspension Notice*" has the meaning set forth in Section 4(c).

"*Underwritten Offering*" means a registration in which Registrable Securities are sold to an underwriter or underwriters on a firm commitment basis for reoffering to the public.

"*Units"* has the meaning given to it in the Purchase Agreement.

"*Violations*" has the meaning set forth in Section 6(a).

"Warrants" means the warrants issued by the Company and purchased by the Purchaser pursuant to the Purchase Agreement.

2. Registration.

a. The Company agrees to file with the Commission a Registration Statement under the Securities Act on Form S-1 (or, if applicable, Form S-3), no later than the Filing Deadline, covering the offer and resale of all of the Registrable Securities on a continuous basis pursuant to Rule 415 (the "*Initial Registration Statement*"). The Company shall use commercially reasonable efforts to have the Registration Statement declared effective by the Commission as soon as practicable, but in no event later than the Effectiveness Deadline. Notwithstanding the registration obligations set forth in the preceding sentences of this Section 2(a), if, in response to its filing of the Initial Registration Statement, the Company receives a Commission comment that all of the Registrable Securities cannot be registered for resale on the Initial Registration Statement, then the Company shall promptly inform the Purchaser thereof and, upon the written request of the Required Holders, either (i) file amendments to the Initial Registration Statement, or (ii) withdraw the Initial Registration Statement and file a new registration statement (a "*New Registration Statement*"), in either case covering the maximum number of Registrable Securities consistent with such Commission comment, and, as promptly as practicable thereafter, taking into account such Commission comment, file a Registration Statement covering the balance of the Registrable Securities. In no event shall the Company include any securities other than Registrable Securities on any Registration Statement under this Section 2 without the prior written consent of the Required Holders.

b. [intentionally omitted]

c. Effectiveness. The Company shall cause any Registration Statement filed under Section 2 to be declared effective under the Securities Act as promptly as possible after the filing thereof.

d. [intentionally omitted].

e. Underwritten Offering.

(i) If the holders of not less than a majority of any class of Registrable Securities included in any offering pursuant to a Registration Statement filed pursuant to Section 2 so elect, such offering shall be in the form of an Underwritten Offering and the Company, if necessary, shall amend or supplement such Registration Statement for such purpose. The holders of a majority of the class of Registrable Securities included in such Underwritten Offering shall, after consulting with the Company, have the right to select the managing underwriter or underwriters for the offering.

(ii) In the case of an Underwritten Offering pursuant to Section 2.e(i), the Company shall cause the senior executive officers of the Company to participate in the customary "road show" presentations that may be reasonably requested by the managing underwriter in any such Underwritten Offering and otherwise to facilitate, cooperate with, and participate in each proposed offering contemplated herein and customary selling efforts related thereto (provided, that such activities shall not unreasonably interfere with the duties of such officers in the ordinary course of the Company's business).

(iii) In the case of an Underwritten Offering pursuant to Section 2.e(i), the Company shall cooperate with the selling holders of Registrable Securities and the managing underwriter, underwriters or agent, if any, to facilitate the timely preparation and delivery of certificates representing Registrable Securities to be sold and not bearing any restrictive legends.

3. Registration Procedures. At such time as the Company is obligated to file a Registration Statement with the Commission pursuant to Section 2, the Company will use reasonable best efforts to effect the registration of the Registrable Securities in accordance with the intended method of disposition thereof and, pursuant thereto, the Company shall have the following obligations:

a. The Company shall keep each Registration Statement effective pursuant to Rule 415 at all times from its effective time until the earlier of (i) the date as of which the Common Stock covered by such Registration Statement cease to be Registrable Securities or (ii) the date on which the Purchaser shall have sold all of the Registrable Securities covered by such Registration Statement (the "*Registration Period*"). The Company shall ensure that each Registration Statement (including any amendments or supplements thereto and Prospectuses contained therein) shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein (in the case of Prospectuses, in the light of the circumstances in which they were made) not misleading.

b. The Company shall prepare and file with the Commission such amendments and supplements to a Registration Statement and the Prospectus used in connection with such Registration Statement, which Prospectus is to be filed pursuant to Rule 424 promulgated under the Securities Act, as may be necessary to keep such Registration Statement effective at all times during the Registration Period, and, during such period, comply with the provisions of the Securities Act with respect to the disposition of all Registrable Securities of the Company covered by such Registration Statement until such time as all of such Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the seller or sellers thereof as set forth in such Registration Statement. In the case of amendments and supplements to a Registration Statement that are required to be filed pursuant to this Agreement (including pursuant to this Section 3(b)) by reason of the Company filing a report on Form 10-Q, Form 10-K or any analogous report under the Exchange Act, the Company shall have incorporated such report by reference into such Registration Statement, if applicable, or shall file such amendments or supplements with the Commission on the same day on which the Exchange Act report is filed which created the requirement for the Company to amend or supplement such Registration Statement.

c. The Purchaser shall have the right to select one legal counsel to review and oversee any registration pursuant to this Agreement ("*Legal Counsel*"), as designated by the Required Holders. The Company and Legal Counsel shall reasonably cooperate with each other in performing the Company's obligations under this Agreement. The Company shall (A) permit Legal Counsel to review and comment upon (i) a Registration Statement at least five (5) Business Days prior to its filing with the Commission and (ii) all amendments and supplements to all Registration Statements (except for Annual Reports on Form 10-K, and Reports on Form 10-Q and any similar or successor reports) within a reasonable number of days prior to their filing with the Commission, and (B) not file any Registration Statement or amendment or supplement thereto in a form to which Legal Counsel reasonably objects. The Company shall not submit a request for acceleration of the effectiveness of a Registration Statement or any amendment or supplement thereto without the prior approval of Legal Counsel, which consent shall not be unreasonably withheld. The Company shall promptly furnish to Legal Counsel, without charge, (i) copies of any correspondence from the Commission or the staff of the Commission to the Company or its representatives relating to any Registration Statement, (ii) after the same is prepared and filed with the Commission, one copy of any Registration Statement and any amendment(s) thereto, including financial statements and schedules, all documents incorporated therein by reference, if requested by the Purchaser, and all exhibits and (iii) upon the effectiveness of any Registration Statement, one copy of the Prospectus included in such Registration Statement and all amendments and supplements thereto. The Company shall reasonably cooperate with Legal Counsel in performing the Company's obligations pursuant to this Section 3.

d. The Company shall promptly furnish to the Purchaser, without charge, (i) after the same is prepared and filed with the Commission, at least one copy of such Registration Statement and any amendment(s) thereto, including financial statements and schedules, all documents incorporated therein by reference, if requested by the Purchaser, all exhibits and each preliminary Prospectus, (ii) upon the effectiveness of any Registration Statement, ten (10) copies of the Prospectus included in such Registration Statement and all amendments and supplements thereto (or such other number of copies as the Purchaser may reasonably request) and (iii) such other documents, including copies of any preliminary or final Prospectus, as the Purchaser may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities owned by the Purchaser.

e. The Company shall (i) register and qualify, unless an exemption from registration and qualification applies, the resale by the Purchaser of the Registrable Securities covered by a Registration Statement under such other securities or "blue sky" laws of all applicable jurisdictions in the United States, (ii) prepare and file in those jurisdictions, such amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period, (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period, and (iv) take all other actions reasonably necessary or advisable to qualify the Registrable Securities for sale in such jurisdictions; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(e), (y) subject itself to general taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction. The Company shall promptly notify Legal Counsel and the Purchaser of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Registrable Securities for sale under the securities or "blue sky" laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

f. The Company shall notify Legal Counsel and the Purchaser in writing of the happening of any event, as promptly as practicable after becoming aware of such event, as a result of which the Prospectus included in a Registration Statement, as then in effect, includes an untrue statement of a material fact or omission to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (provided that in no event shall such notice contain any material, nonpublic information), and, subject to Section 3(l), promptly prepare a supplement or amendment to such Registration Statement to correct such untrue statement or omission, and deliver ten (10) copies of such supplement or amendment to Legal Counsel and the Purchaser (or such other number of copies as Legal Counsel or the Purchaser may reasonably request). The Company shall also promptly notify Legal Counsel and the Purchaser in writing (i) when a Prospectus or any Prospectus supplement or post-effective amendment has been filed, and when a Registration Statement or any post-effective amendment has become effective (notification of such effectiveness shall be delivered to Legal Counsel and the Purchaser by facsimile on the same day of such effectiveness and by overnight mail), (ii) of any request by the Commission for amendments or supplements to a Registration Statement or related Prospectus or related information, and (iii) of the Company's reasonable determination that a post-effective amendment to a Registration Statement would be appropriate.

g . The Company shall use commercially reasonable efforts to prevent the issuance of any stop order or other suspension of effectiveness of a Registration Statement, or the suspension of the qualification of any of the Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible moment and to notify Legal Counsel and the Purchaser of the issuance of such order and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

h. The Company shall hold in confidence and not make any disclosure of information concerning the Purchaser provided to the Company unless (i) disclosure of such information is necessary to comply with federal or state securities laws, (ii) the disclosure of such information is necessary to avoid or correct a misstatement or omission in any Registration Statement, (iii) the release of such information is ordered pursuant to a subpoena or other final, non-appealable order from a court or governmental body of competent jurisdiction, or (iv) such information has been made generally available to the public other than by disclosure in violation of this Agreement or any other agreement. The Company agrees that it shall, upon learning that disclosure of such information concerning the Purchaser is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt written notice to the Purchaser and allow the Purchaser, at the Purchaser's expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, such information.

i. If requested by the Purchaser, the Company shall (i) as soon as practicable incorporate in a Prospectus supplement or post-effective amendment such information as the Purchaser reasonably requests to be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the number of Registrable Securities being offered or sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities to be sold in such offering; (ii) as soon as practicable make all required filings of such Prospectus supplement or post-effective amendment after being notified of the matters to be incorporated in such Prospectus supplement or post-effective amendment; and (iii) as soon as practicable, supplement or make amendments to any Registration Statement if reasonably requested by the Purchaser holding any Registrable Securities.

j. Notwithstanding anything to the contrary herein, at any time after the Effective Date, the Company may delay the disclosure of material, non-public information concerning the Company the disclosure of which at the time is not, in the good faith opinion of the Board of Directors of the Company and its counsel, in the best interest of the Company and, in the opinion of counsel to the Company, otherwise required (a "*Grace Period*"); provided, that the Company shall promptly (i) notify the Purchaser in writing of the existence of material, non-public information giving rise to a Grace Period (provided that in each notice the Company will not disclose the content of such material, non-public information to the Purchaser) and the date on which the Grace Period will begin, and (ii) notify the Purchaser in writing of the date on which the Grace Period ends; and, provided further, that no Grace Period shall exceed sixty (60) consecutive days and during any three hundred sixty five (365) day period such Grace Periods shall not exceed an aggregate of one hundred twenty (120) days and the first day of any Grace Period must be at least two (2) trading days after the last day of any prior Grace Period. For purposes of determining the length of a Grace Period above, the Grace Period shall begin on and include the date the Purchaser receives the notice referred to in clause (i) and shall end on and include the later of the date the Purchaser receives the notice referred to in clause (ii) and the date referred to in such notice. The provisions of Section 3(g) hereof shall not be applicable during the period of any Grace Period. Upon expiration of the Grace Period, the Company shall again be bound by the first sentence of Section 3(f) with respect to the information giving rise thereto unless such material, non-public information is no longer applicable. Notwithstanding anything to the contrary, the Company shall cause its transfer agent to deliver unlegended shares of Common Stock to a transferee of the Purchaser in connection with any sale of Registrable Securities with respect to which such Purchaser has entered into a contract for sale, and delivered a copy of the Prospectus included as part of the applicable Registration Statement (unless an exemption from such prospectus delivery requirements exists), prior to the Purchaser's receipt of the notice of a Grace Period and for which the Purchaser has not yet settled.

4. Obligations of the Purchaser Relating to Registration.

a. At least ten Business Days prior to the first anticipated filing date of a Registration Statement, the Company shall notify the Purchaser in writing of the information the Company requires from the Purchaser to have any of the Purchaser's Registrable Securities included in such Registration Statement. It shall be a condition precedent to the obligations of the Company to complete the registration pursuant to this Agreement with respect to the Registrable Securities of the Purchaser that the Purchaser shall furnish to the Company, not later than five Business Days after the date of the Company's notice, such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it as shall be reasonably required to effect the effectiveness of the registration of the Purchaser's Registrable Securities.

b. The Purchaser, by its acceptance of the Registrable Securities, agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of any Registration Statement hereunder, unless such Purchaser has notified the Company in writing of its election to exclude all of such Purchaser's Registrable Securities from such Registration Statement.

c. The Purchaser agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 3(g) or the first sentence of Section 3(f) (each a "*Suspension Notice*"), the Purchaser will immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement(s) covering such Registrable Securities until the Purchaser's receipt of the copies of the supplemented or amended Prospectus contemplated by Section 3(g) or the first sentence of Section 3(f) or receipt of notice that no supplement or amendment is required. Notwithstanding anything to the contrary, the Company shall cause its transfer agent to deliver unlegended shares of Common Stock to a transferee of the Purchaser in accordance with the terms of the Purchase Agreement in connection with any sale of Registrable Securities with respect to which such Purchaser has entered into a contract for sale prior to such Purchaser's receipt of a notice from the Company of the happening of any event of the kind described in Section 3(g) or the first sentence of Section 3(f) and for which the Purchaser has not yet settled. In any event, the Company shall not be entitled to deliver more than one Suspension Notice in any one year.

d. The Purchaser covenants and agrees that it will comply with the prospectus delivery requirements of the Securities Act as applicable to it or an exemption therefrom in connection with sales of Registrable Securities pursuant to the Registration Statement.

5 . Expenses of Registration. All expenses, other than Selling Expenses, with respect to the registration and disposition of Registrable Securities including, without limitation, all registration, listing and qualifications fees, printers and accounting fees, and fees and disbursements of counsel for the Company and reasonable fees (which shall be proportional and reasonable in relation to the market value of the Registrable Securities being registered) of one counsel for the Purchaser, who shall be selected by the Required Holders shall be paid by the Company. All Selling Expenses relating to Registrable Securities registered pursuant to this Agreement shall be borne and paid by the holders of such Registrable Securities, in proportion to the number of Registrable Securities registered for each such holder.

6. Indemnification. In the event any Registrable Securities are included in a Registration Statement under this Agreement:

a. To the fullest extent permitted by law, the Company will, and hereby does, indemnify, hold harmless and defend the Purchaser, the directors, officers, managers, members, partners, employees, agents, representatives of, and each Person, if any, who controls the Purchaser within the meaning of the Securities Act or the Exchange Act (each, a "*Purchaser Indemnified Party*"), against any losses, claims, damages, liabilities, judgments, fines, penalties, charges, costs, attorneys' fees, amounts paid in settlement or expenses, joint or several, (collectively, "*Claims*") incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the Commission, whether pending or threatened, whether or not an indemnified party is or may be a party thereto ("*Indemnified Damages"),* to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any amendment thereof or supplement thereto or in any filing made in connection with the qualification of the offering under the securities or other "blue sky" laws of any jurisdiction in which Registrable Securities are offered ("*Blue Sky Filing*"), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in any Prospectus or free writing prospectus (as defined in Rule 405 under the Securities Act), or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in the light of the circumstances under which the statements therein were made, not misleading, or (iii) any violation of this Agreement (the matters in the foregoing clauses (i) through (iii) being, collectively, " *Violations*"). Subject to Section 6(c), the Company shall reimburse the Purchaser Indemnified Parties, promptly as such expenses are incurred and are due and payable, for any legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): shall not apply to a Claim (a) arising out of or based upon a Violation which occurs in reliance upon and in conformity with information furnished in writing to the Company by or on behalf of such Purchaser Indemnified Party expressly for use in any Prospectus or supplement thereto or the omission or alleged omission in such written information to state a material fact required to be stated therein or necessary to make the statements therein not misleading, if such Prospectus or supplement thereto was timely made available by the Company pursuant to Section 3(d); (b) to the extent such Claim is based on a failure of such Purchaser Indemnified Party to deliver or to cause to be delivered the Prospectus made available by the Company, including a corrected Prospectus, if such Prospectus or corrected Prospectus was timely made available by the Company pursuant to Section 3(d); (c) in which amounts are paid in settlement of any Claim and such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld or delayed; (d) in which such Purchaser Indemnified Party fails to cease all offers and sales of Registrable Securities in accordance with Section 4(c) herein, to the extent such Claim is based on such failure; and (e) arising out of or based solely upon a breach by such Purchaser Indemnified Party of such Purchaser Indemnified Party's obligations set forth herein. This indemnity shall be in addition to any liability the Company may otherwise have. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Purchaser Indemnified Party and shall survive the transfer of the Registrable Securities by the Purchaser pursuant to Section 8.

b. In connection with any Registration Statement in which the Purchaser is participating, to the fullest extent permitted by law, such Purchaser agrees to severally and not jointly indemnify, hold harmless and defend the Company and each of its directors, officers, employees, agents and representatives and each Person, if any, who controls the Company within the meaning of the Securities Act or the Exchange Act (each, an "*Company Indemnified Party*"), against any Claim or Indemnified Damages to which any of them may become subject, under the Securities Act, the Exchange Act or otherwise, insofar as such Claim or Indemnified Damages arise out of or are based upon (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any amendment thereof or supplement thereto or in any filing made in connection with a Blue Sky Filing, or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading or (ii) any untrue statement or alleged untrue statement of a material fact contained in any Prospectus or free writing prospectus (as defined in Rule 405 under the Securities Act), or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in the light of the circumstances under which the statements therein were made, not misleading, in each case to the extent, and only to the extent, that such untrue statement or omission of a material fact is contained in any written information furnished to the Company by such Purchaser expressly for use in connection with such Registration Statement; and, subject to Section 6(c), such Purchaser will reimburse any legal or other expenses reasonably incurred by an Company Indemnified Party in connection with investigating or defending any such Claim; provided, however, that the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of such Purchaser, which consent shall not be unreasonably withheld or delayed and provided further, that the obligation to indemnify shall be limited to the net proceeds (after underwriting fees, commissions or discounts) actually received by such holder from the sale of Registrable Securities pursuant to such Registration Statement. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Company Indemnified Party and shall survive the transfer of the Registrable Securities by the Purchaser pursuant to Section 8.

c . Promptly after receipt by a Purchaser Indemnified Party or Company Indemnified Party under this Section 6 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim, such Purchaser Indemnified Party or Company Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Purchaser Indemnified Party or the Company Indemnified Party, as the case may be; provided, however, that a Purchaser Indemnified Party or Company Indemnified Party shall have the right to retain its own counsel with the fees and expenses of not more than one counsel for such Purchaser Indemnified Party or Company Indemnified Party to be paid by the indemnifying party, if, in the reasonable opinion of counsel retained by the indemnifying party, the representation by such counsel of the Purchaser Indemnified Party or Company Indemnified Party and the indemnifying party would be inappropriate due to actual or potential differing interests between such Purchaser Indemnified Party or Company Indemnified Party and any other party represented by such counsel in such proceeding. In the case of a Purchaser Indemnified Party, legal counsel referred to in the immediately preceding sentence shall be selected by the Required Holders. The Company Indemnified Party or Purchaser Indemnified Party shall cooperate fully with the indemnifying party in connection with any negotiation or defense of any such action or Claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Company Indemnified Party or Purchaser Indemnified Party which relates to such action or Claim. The indemnifying party shall keep the Company Indemnified Party or Purchaser Indemnified Party reasonably apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its prior written consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the prior written consent of the Company Indemnified Party or Purchaser Indemnified Party, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Company Indemnified Party or Purchaser Indemnified Party of a release from all liability in respect to such Claim or litigation, and such settlement shall not include any admission as to fault on the part of the Company Indemnified Party. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Company Indemnified Party or Purchaser Indemnified Party with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Purchaser Indemnified Party or Company Indemnified Party under this Section 6, except to the extent that the indemnifying party is prejudiced in its ability to defend such action.

d. The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred.

e. The indemnity agreements contained herein shall be in addition to (i) any cause of action or similar right of the Company Indemnified Party or Purchaser Indemnified Party against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to the law.

7. Contribution. To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 to the fullest extent permitted by law; provided, however, that: (i) no Person involved in the sale of Registrable Securities which Person is guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) in connection with such sale shall be entitled to contribution from any Person involved in such sale of Registrable Securities who was not guilty of fraudulent misrepresentation; and (ii) contribution by any seller of Registrable Securities shall be limited in amount to the net amount of proceeds received by such seller from the sale of such Registrable Securities pursuant to such Registration Statement. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The parties agree that it would not be just and equitable if contribution pursuant hereto were determined by pro rata allocation or by any other method or allocation which does not take account of the equitable considerations referred to herein.

8. Assignment of Registration Rights. The registration rights provided pursuant to Sections 2 through 10 of this Agreement shall be assignable in full or in part by the Purchaser to any transferee of such Purchaser's Registrable Securities if: (i) the Purchaser agrees in writing with the transferee or assignee to assign such rights, and a copy of such agreement is furnished to the Company within a reasonable time after such assignment; (ii) the Company is, contemporaneous with such transfer or assignment, furnished with written notice of (a) the name and address of such transferee or assignee, and (b) the Registrable Securities with respect to which such registration rights are being transferred or assigned; and (iii) at or before the time the Company receives the written notice contemplated by clause (ii) of this sentence the transferee or assignee agrees in writing with the Company to be bound by all of the provisions contained herein.

9. Amendment. Provisions of this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the Required Holders. Any amendment or waiver effected in accordance with this Section 9 shall be binding upon the Purchaser and the Company. No such amendment shall be effective to the extent that it applies to less than all of the holders of the Registrable Securities.

10. Preservation of Rights. Except with the prior consent of the Required Holders, the Company shall not, for so long as there are Registrable Securities, (a) grant any registration rights to third parties that are inconsistent with the rights granted hereunder, or (b) enter into any agreement, take any action, or permit any change to occur, with respect to its securities that violates or subordinates the rights expressly granted to the holders of Registrable Securities in this Agreement.

11. Rule 144 Compliance. With a view to making available to the holders of Registrable Securities the benefits of Rule 144 under the Securities Act and any other rule or regulation of the Commission that may at any time permit a holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3 (or any successor form), the Company shall:

a. make and keep public information available, as those terms are understood and defined in Rule 144 at all times; and

b. use its commercially reasonable best efforts to file with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act.

12. Inspection.

a. Upon execution, a copy of this Agreement and any extension or amendment thereof shall be filed with the Secretary of the Company and during the term of this agreement shall be open to inspection by a shareholder of the Company or its agent, upon the same terms as the records of shareholders of the Company are open to inspection.

13. Miscellaneous.

a. A Person is deemed to be a holder of Registrable Securities whenever such Person owns or is deemed to own of record such Registrable Securities.

b. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally, (ii) upon receipt, when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party), so long as such facsimile is followed by mail delivery of the same information contained in such facsimile, or (iii) one Business Day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses for such communications shall be:

If to the Company: Giga-tronics Incorporated
4650 Norris Canyon Road
San Ramon, California 94583
Attn: John Regazzi
Email: jregazzi@gigatronics.com

If to the Purchaser, to the address set forth underneath the Purchaser's name on the signature page hereto.

Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, or (B) provided by a courier or overnight courier service shall be rebuttable evidence of personal service, or receipt from a nationally recognized overnight delivery service in accordance with clause (i) or (iii) above, respectively.

c. Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, shall not operate as a waiver thereof.

d. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of California.

e. This Agreement and the instruments referenced herein constitute the entire agreement among the parties hereto with respect to the subject matter hereof and thereof. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein and therein. This Agreement and the instruments referenced herein supersede all prior agreements and understandings among the parties hereto with respect to the subject matter hereof and thereof.

f. Subject to the requirements of Section 8, this Agreement shall inure to the benefit of and be binding upon the permitted successors and assigns of each of the parties hereto.

g. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

h. This Agreement may be executed in identical counterparts, each of which shall be deemed an original but all of which shall constitute one and the same agreement. This Agreement, once executed by a party, may be delivered to the other party hereto by facsimile transmission of a copy of this Agreement bearing the signature of the party so delivering this Agreement.

i. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as any other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

j. All consents and other determinations required to be made by the Purchaser pursuant to this Agreement shall be made, unless otherwise specified in this Agreement, by the Required Holders.

k. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent and no rules of strict construction will be applied against any party.

l. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

m. As used herein, "Dollar", "US Dollar" and "$" each mean the lawful money of the United States.

n. The parties acknowledge that it would be impossible to fix money damages for violations of this Agreement and that such violations will cause irreparable injury for which an adequate remedy at law is not available. The parties hereby agree that any party hereto may, in its sole discretion, apply to any California Court for specific performance or similar relief as such court may deem just and proper in order to enforce this Agreement or prevent any violation thereof and, to the extent permitted by applicable law, each party waives any objection or defense to the imposition of such relief. Nothing herein shall be construed to prohibit any party from bringing any action for damages in addition to an action for specific performance or an injunction for a breach of this Agreement.

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IN WITNESS WHEREOF, the parties have executed this Investor Rights Agreement as of the date first written above.

GIGA-TRONICS INCORPORATED

By: _____
Name: John Regazzi
Title: President and Chief Executive Officer

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]
[SIGNATURE PAGES OF PURCHASER TO FOLLOW]

IN WITNESS WHEREOF, the parties have executed this Investor Rights Agreement as of the date first written above.

NAME OF PURCHASER

_____

AUTHORIZED SIGNATORY

Signature:_____

Name: _____
Title: _____

Address for Notice:
_____
_____
_____
_____

Telephone No.: _____
E-mail Address: _____
Attention: _____

[Signature Page to Investor Rights Agreement]

Exhibit 10.24

CONDITIONAL WAIVER & MODIFICATION NO. 1 TO LOAN AND SECURITY AGREEMENT

This Conditional Waiver & Modification No. 1 to Loan and Security Agreement (this "Modification") is entered into as of March 26, 2018 (the "Stated Modification Date"), by and between Partners for Growth V, L.P. (" PFG"), Giga-tronics Incorporated, a California corporation, and Microsource, Inc., a California corporation (individually and collectively, jointly and severally, " Borrower"). Capitalized terms used but not defined in this Modification shall have the meanings given them in the Loan Agreement.

Recitals

WHEREAS, PFG and Borrower entered into that certain Loan and Security Agreement dated as of April 27, 2017 (the " Loan Agreement") and certain other Security Documents (as defined below), pursuant to which PFG has made available to Borrower the principal amount of $1,500,000, all of which is outstanding on the Stated Modification Date, in addition to $89,375 in accumulated deferred interest (calculated as of March 23, 2018) which is due and payable on the Maturity Date.

WHEREAS, PFG and Borrower entered into that certain Forbearance under Loan and Security Agreement dated as of August 2, 2017, pursuant to which PFG agreed to forbear from exercising remedies under the Loan Agreement due to Borrower's "Specified Defaults" as defined therein until the earlier to occur of August 31, 2017 and certain therein-specified Termination Events, which forbearance was extended under that certain Forbearance Extension under Loan and Security Agreement dated as of September 1, 2017, pursuant to which PFG agreed to extend the fixed Forbearance expiration date forbear from exercising remedies under the Loan Agreement due to Borrower's "Specified Defaults" as defined therein until the earlier to occur of October 15, 2017 and certain therein-specified Termination Events, which forbearance extension was further extended pursuant to that certain Forbearance Extension under Loan and Security Agreement dated as of February 16, 2018, pursuant to which PFG agreed to extend the fixed Forbearance expiration date before exercising remedies under the Loan Agreement due to Borrower's "Specified Defaults" as defined therein (the " Pending Defaults") until the earlier to occur of March 31, 2018 and certain therein-specified Termination Events (the "Currently Effective Forbearance");

WHEREAS, the Currently Effective Forbearance contemplates a restructuring of (inter alia) the financial covenants applicable under the Loan Agreement in connection with the satisfaction of an equity (or convertible debt) financing condition set forth in Section 9(d) of the Currently Effective Forbearance and Section 7(c) hereof (the "Financing Condition");

WHEREAS, the parties desire to modify the Loan Agreement to waive the Pending Defaults and to anticipate and facilitate the satisfaction of the Financing Condition, the waiver and modification set forth herein to be expressly conditional upon and automatically effective upon the satisfaction of the conditions set forth in Section 7 (including the Financing Condition);

NOW, THEREFORE, in consideration of the foregoing recitals and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, the parties hereto agree as follows:

Agreement

1 . EFFECTIVENESS. Notwithstanding the execution and delivery of this Modification by the parties as of the Stated Modification Date, the modifications, agreements and terms of this Modification shall not be become effective until, but shall automatically become effective upon and as of the date the conditions set forth in Section 7 hereof are satisfied by Borrower (the "Modification Effective Date").

2 . DESCRIPTION OF COLLATERAL. Repayment of the Obligations is secured by the Collateral, as described in the Loan Agreement, in that certain Intellectual Property Security Agreement and related Collateral Agreements and Notices of even date with the Loan Agreement (the "IPSA") and the other Loan Documents entered into on the dates of the Loan Agreement and the Loan Agreement. The above-described security documents, together with all other documents securing and/or perfecting security interests in the repayment of the Obligations, shall be referred to herein as the "Security Documents". Hereinafter, the Security Documents, together with all other documents evidencing or securing the Obligations are referred to as the "Existing Loan Documents".

3. DESCRIPTION OF CHANGES IN TERMS. Effective automatically upon the Modification Effective Date:

(a) Financial Covenants - TNW. Section 5(a) of the Schedule (Minimum TNW) is amended and restated to read in its entirety as follows (italicized for convenience of reading only):

" (a) ***Minimum TNW***: *Measured on the last day of each calendar month from April 30, 2018 though and including March 31, 2019, on a consolidated basis with its Subsidiaries, Borrower shall maintain Tangible Net Worth of not less than $250,000 through December 31, 2018 and $500,000 at all times thereafter.*"

(b) Financial Covenants - Revenues. Section 5(b) of the Schedule (Minimum Revenues) is amended and restated to read in its entirety as follows (italicized for convenience of reading only):

(b) ***Minimum Revenues***: *On a consolidated basis with its Subsidiaries and measured quarterly as of the last day of each calendar quarter, Borrower shall maintain Revenues on a cumulative basis of not less than the minimum thresholds set forth below for the corresponding periods:*

Period Ending	*Threshold*	*Months in Period Calc*
March 31, 2018	*$2,000,000*	*3*
June 30, 2018	*$3,700,000*	*6*
September 30, 2018	*$6,300,000*	*9*
December 31, 2018	*$9,200,000*	*12*
March 31, 2019	*$12,700,000*	*15*

(c) Future Periods. Section 5(c) of the Schedule (Future Periods) is deleted, with all other provisions of Section 5 not superseded in clauses (a) through (c) of this Modification Section 3 remaining in full force and effect.

(d) Definition of "Plan". The definition of "Plan set forth in Section 7 of the Loan Agreement is amended and restated to read in its entirety as follows (italicized for convenience of reading only):

" "*Plan" means Borrower's financial plan as delivered to PFG on March 7, 2018 in that certain Excel format file entitled "PFG covenants 3-7-18.xlsx" for the period ending March 31, 2020, to be replaced by a final Board-approved financial plan on or before April 30, 2018 which shall be consistent in all material respects with the financial plan delivered to PFG.*"

(e) Interest Rate and Terms. The interest rate applicable to monetary Obligations and the payment terms thereof (cash and deferred payment) shall revert to the terms stated in the Loan Agreement from the Default Rate applicable under the Currently Effective Forbearance.

(f) Borrower Address. The address of Borrower for purposes of the Loan Documents is, henceforth: 5990 Gleason Drive, Dublin CA, 94568.

4 . CONTINUING VALIDITY. Borrower understands and agrees that in conditionally modifying the existing Obligations, PFG is relying upon Borrower's representations, warranties and agreements as set forth in the Existing Loan Documents. Except as expressly modified pursuant to this Modification, the terms of the Existing Loan Documents remain unchanged and in full force and effect. PFG's agreement to modify the existing Obligations in no way shall obligate PFG to give any future consents or waivers or make any future modifications to the Obligations. Nothing in this Modification shall constitute a satisfaction of the Obligations or a waiver of any Default or Event of Default under the Existing Loan Documents, except as set forth in Section 5. It is the intention of PFG and Borrower to retain as liable parties all makers and endorsers, if any, of the Existing Loan Documents, unless the party is expressly released by PFG in writing. Unless expressly released herein, no maker, endorser, or guarantor will be released by virtue of this Modification. The terms of this paragraph apply not only to this Modification, but also to all subsequent loan modification agreements.

5 . ACKNOWLEDGMENT OF SPECIFIED DEFAULT; CONDITIONAL WAIVER. Borrower acknowledges that, but for the Currently Effective Forbearance, it is currently in default under the Loan Agreement due to the Pending Defaults. If no Default or Event of Default has occurred and is continuing under the Loan Agreement, other than the Pending Defaults, and Borrower timely satisfies the conditions set forth in Section 7 hereof, then PFG shall be deemed to have forever waived the Specified Defaults. Borrower hereby acknowledges and agrees that except as specifically provided herein, nothing in this Section or anywhere in this Modification shall be deemed or otherwise construed as a waiver by PFG of any of its rights and remedies pursuant to the Existing Loan Documents, applicable law or otherwise. The waiver of Specified Defaults set forth in this Modification shall be limited precisely as written and shall not be deemed (a) to be a forbearance, waiver or modification of any other term or condition of the Loan Agreement or of any other instrument or agreement referred to therein or to prejudice any right or remedy which PFG may now have or may have in the future under or in connection with the Loan Agreement, the Existing Loan Documents or any instrument or agreement referred to therein; (b) to be a consent to any future amendment or modification, forbearance or waiver to any instrument or agreement the execution and delivery of which is consented to hereby, or to any waiver of any of the provisions thereof; or (c) to limit or impair PFG's right to demand strict performance of all terms and covenants as of any date, subject to this Modification. The Loan Agreement, as amended, shall continue in full force and effect. This Modification shall be construed in connection with and as part of the Loan Documents and all terms, conditions, representations, warranties, covenants and agreements set forth in the Loan Documents are hereby ratified and confirmed and shall remain in full force and effect, subject to any update of the Representations delivered under Section 7(f).

6. Borrowers' Representations And Warranties. Borrower represents and warrants that:

(a) immediately upon giving effect to this Modification (i) the representations and warranties contained in the Existing Loan Documents are true, accurate and complete in all material respects as of the date hereof (except to the extent qualified in the updated Representations deliverable to PFG on or before the Stated Modification Date), and (ii) no Event of Default has occurred and is continuing, other than the Pending Defaults;

(b) Borrower has the corporate power and authority to execute and deliver this Modification, to amend the PFG Warrants and to perform its obligations under the Existing Loan Documents and PFG Warrants, as contemplated by this Modification;

(c) the Constitutional Documents of Borrower delivered to PFG remain true, accurate and complete and have not been amended, supplemented or restated and are and continue to be in full force and effect;

(d) this Modification has been duly authorized, executed and delivered by Borrower and (i) constitutes the binding obligation of Borrower, enforceable against Borrower in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, liquidation, moratorium or other similar laws of general application and equitable principles relating to or affecting creditors' rights; (ii) does not conflict with any law or regulation or judgment or the Constitutional Documents of Borrower, or any agreement or document to which Borrower is a party or which is binding upon it or any of this assets; and (iii) does not require any authorization, approval, consent (including stockholder or member consent) of any Person, or any license or registration in any jurisdiction, for its lawful authorization, execution, performance, validity or enforceability, except to the extent such authorization, approval, consent (including stockholder or member consent) of any Person, license or registration is secured on or prior to the Stated Modification Date and provided to PFG;

(e) as of the date hereof, with Knowledge that PFG is relying on Borrower's representations and warranties herein (including the Representations) as a basis for entering into this Modification at Borrower's request, Borrower has no defenses against its obligation to repay the Obligations and it has no claims of any kind against PFG. Borrower acknowledges that PFG has acted in good faith and has conducted its relationship with Borrower in a commercially reasonable manner, including in connection with this Modification and in connection with the Existing Loan Documents;

(f) with respect to any Loan Documents binding upon a Person not party to this Modification, each such Person has been apprised of this Modification, has consented to Borrower's execution and delivery of this Modification and, to the extent not executed concurrently with this Modification (or as a condition subsequent hereto), has agreed if so requested by PFG to promptly execute and deliver to PFG a reaffirmation of its obligations under any Existing Loan Documents to which it is a party or is bound;

(g) the IPSA and associated Collateral Agreements and Notices disclose an accurate, complete and current listing of all Collateral that consists of Intellectual Property (as defined in said IP Security Agreement) or Borrower has included revised and updated Intellectual Property schedules as part of an update to the Representations required in Section 7(f) of this Modification and as part of the Reaffirmation of IPSA required in Section 7(h) of this Modification (and in their respective associated Exhibits and Schedules);

(h) Borrower hereby ratifies, confirms and reaffirms, all and singular, the terms and disclosures contained in the Representations dated as of the Stated Modification Date; and

(i) Except as expressly stated in this Modification, neither PFG nor any agent, employee or representative of PFG has made any statement or representation to Borrower regarding any fact relied upon by Borrower in entering into this Modification, (ii) Borrower has made such investigation of the facts pertaining to this Modification and all of the matters appertaining thereto, as it deems necessary, and (iii) the terms of this Modification are contractual and not a mere recital.

Borrower understands and acknowledges that PFG is entering into this Modification in reliance upon, and in partial consideration for, the above representations and warranties, and agrees that such reliance is reasonable and appropriate.

7 . CONDITIONS. The effectiveness of this Modification is conditioned upon satisfaction of each of the following, with the consequence of a failure to meet the following conditions as set forth in the proviso at the end of this Section 7:

(a) Execution and Delivery. Borrower shall have duly executed and delivered to PFG a counterpart of this Modification and such other documents and instruments as are otherwise required in this Section 7;

(b) Constitutional and Authority Documents. Applicable only to the extent the same may have been modified or superseded or are no longer accurate since the date of the Loan Agreement, PFG shall have received copies, certified by a duly authorized officer of Borrower, to be true and complete as of the Stated Modification Date (or, if later, the Modification Effective Date), of each of (i) the governing documents of Borrower as in effect on the date hereof, (ii) any necessary resolutions of Borrower authorizing the execution and delivery of this Modification, the other documents executed in connection herewith (including the PFG Warrants) and Borrower's performance of all of the transactions contemplated hereby, and (iii) an incumbency certificate giving the name and bearing a specimen signature of each individual who shall be so authorized on behalf of Borrower;

(c) Financing Condition. Borrower shall have (i) consummated, substantially concurrently with the effectiveness of this Modification (which shall be on or before March 26, 2018, unless PFG agrees in its discretion to an extension), an equity or subordinated debt investor financing providing not less than $1,000,000 in gross cash proceeds to Borrower, and (ii) provided true and correct copies of the fully-executed agreements and/or instruments that demonstrate satisfaction of the requirement of Section 7(c) (the Financing Condition);

(d) Restatement of PFG Warrants. Borrower shall have executed and delivered Second Amended and Restated Warrants to each of Partners for Growth IV, L.P., PFG Equity Investors, LLC and SVB Financial Group, in the form set forth in Exhibit A hereto (the "PFG Warrants");

(e) Lender Expenses. Borrower shall have paid, upon PFG invoice, all unpaid fees and Lender Expenses incurred pursuant to or in connection with the Currently Expiring Forbearance and this Modification;

(f) Updates to Representations. Borrower shall have delivered within one (1) Business Day prior to the Stated Modification Date an update to the Representations delivered to PFG on the date of the Loan Agreement, with the information and disclosures contained therein true, correct, accurate and complete as of the Stated Modification Date and the date delivered, appended hereto as Exhibit B;

(g) Landlord Consent. Within thirty (30) days of the Stated Modification Date, Borrower shall use all reasonable commercial efforts to procure in PFG's favor a landlord consent for the landlord of its principal premises at: 5990 Gleason Drive, Dublin CA, 94568.

(g) Authority Documents. Borrower shall have promptly provided such documentation of the authorization of this Modification and the restatement of the PFG Warrants as PFG may reasonably require;

(h) Stock Issuance. Within fifteen days, Borrower (Parent) shall have issued one hundred fifty thousand (150,000) common shares to PFG and its designees in consideration of the elimination of the "put" mechanism under the PFG Warrants.

(i) IPSA Reaffirmation. Borrower shall have executed and delivered the Reaffirmation of IPSA appended hereto as Exhibit C, together with any updates to the Intellectual Property and Domain Rights since the original Effective Date of the Loan Agreement (or later update of information, as applicable);

provided, however, any material failure of any of the conditions set forth in this Section 7 (as determined in PFG's good faith and reasonable judgment) shall mean that this Modification has not become (or if such failure is in relation to a condition subsequent, is no longer) effective and that the terms of the Currently Effective Forbearance remain in effect (or if such failure is in relation to a condition subsequent, such terms are reinstated).

8. CONSISTENT CHANGES. The Existing Loan Documents are hereby amended wherever necessary or appropriate to reflect the modifications and other transactions contemplated by this Modification.

9. RATIFICATION OF EXISTING LOAN DOCUMENTS. Borrower hereby ratifies, confirms, and reaffirms all terms and conditions of the Existing Loan Documents and all security and other collateral granted to PFG thereunder, and confirms that the Indebtedness secured thereby includes, without limitation, the Obligations.

10. Further Assurances. Borrower agrees to execute such further documents and instruments and to take such further actions as PFG may request in its good faith business judgment to carry out the purposes and intent of this Modification.

11. RELEASE. FOR AND IN CONSIDERATION OF PFG'S AGREEMENTS CONTAINED HEREIN, BORROWER, TOGETHER WITH ITS, SUCCESSORS AND ASSIGNS (INDIVIDUALLY AND COLLECTIVELY, "RELEASORS") HEREBY VOLUNTARILY AND KNOWINGLY RELEASES AND FOREVER WAIVES AND DISCHARGES PFG AND EACH OF ITS RESPECTIVE PARENTS, DIVISIONS, SUBSIDIARIES, AFFILIATES, MEMBERS, MANAGERS, PARTICIPANTS, PREDECESSORS, SUCCESSORS, AND ASSIGNS, AND EACH OF THEIR RESPECTIVE CURRENT AND FORMER DIRECTORS, OFFICERS, SHAREHOLDERS, MEMBERS, MANAGERS, PARTNERS, AGENTS, AND EMPLOYEES, AND EACH OF THEIR RESPECTIVE PREDECESSORS, SUCCESSORS, HEIRS, AND ASSIGNS (INDIVIDUALLY AND COLLECTIVELY, THE "RELEASED PARTIES") FROM ALL POSSIBLE CLAIMS, COUNTERCLAIMS, DEMANDS, ACTIONS, CAUSES OF ACTION, DAMAGES, COSTS, EXPENSES AND LIABILITIES WHATSOEVER, WHETHER KNOWN OR UNKNOWN, ANTICIPATED OR UNANTICIPATED, SUSPECTED OR UNSUSPECTED, FIXED, CONTINGENT OR CONDITIONAL, OR AT LAW OR IN EQUITY, IN ANY CASE ORIGINATING IN WHOLE OR IN PART ON OR BEFORE THE EFFECTIVE DATE THAT ANY OF THE RELEASORS MAY NOW OR HEREAFTER HAVE AGAINST THE RELEASED PARTIES, IF ANY, IRRESPECTIVE OF WHETHER ANY SUCH CLAIMS ARISE OUT OF CONTRACT, TORT, VIOLATION OF LAW OR REGULATIONS, OR OTHERWISE, INCLUDING WITHOUT LIMITATION ARISING DIRECTLY OR INDIRECTLY FROM THE LAWSUIT, ANY PRIOR OR EXISTING LOANS BETWEEN RELEASORS AND RELEASED PARTIES, ANY OF THE EXISTING LOAN DOCUMENTS, THE EXERCISE OF ANY RIGHTS AND REMEDIES UNDER ANY OF THE EXISTING LOAN DOCUMENTS, AND/OR NEGOTIATION FOR AND EXECUTION OF THIS AGREEMENT, INCLUDING, WITHOUT LIMITATION, ANY CONTRACTING FOR, CHARGING, TAKING, RESERVING, COLLECTING OR RECEIVING INTEREST IN EXCESS OF THE HIGHEST LAWFUL RATE APPLICABLE. EACH OF THE RELEASORS WAIVES THE BENEFITS OF ANY LAW INCLUDING SECTION 1542 OF THE CALIFORNIA CIVIL CODE, WHICH MAY PROVIDE IN SUBSTANCE: "A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN ITS FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY IT MUST HAVE MATERIALLY AFFECTED ITS SETTLEMENT WITH THE DEBTOR." EACH OF THE RELEASORS UNDERSTANDS THAT THE FACTS WHICH IT BELIEVES TO BE TRUE AT THE TIME OF MAKING THE RELEASE PROVIDED FOR HEREIN MAY LATER TURN OUT TO BE DIFFERENT THAN IT NOW BELIEVES, AND THAT INFORMATION WHICH IS NOT NOW KNOWN OR SUSPECTED MAY LATER BE DISCOVERED. EACH OF THE RELEASORS ACCEPTS THIS POSSIBILITY, AND EACH OF THEM ASSUMES THE RISK OF THE FACTS TURNING OUT TO BE DIFFERENT AND NEW INFORMATION BEING DISCOVERED; AND EACH OF THEM FURTHER AGREES THAT THE RELEASE PROVIDED FOR HEREIN SHALL IN ALL RESPECTS CONTINUE TO BE EFFECTIVE AND NOT SUBJECT TO TERMINATION OR RESCISSION BECAUSE OF ANY DIFFERENCE IN SUCH FACTS OR ANY NEW INFORMATION. By entering into this release, Borrower recognizes that no facts or representations are ever absolutely certain and it may hereafter discover facts in addition to or different from those which it presently knows or believes to be true, but that it is the intention of Borrower hereby to fully, finally and forever settle and release all matters, disputes and differences, known or unknown, suspected or unsuspected; accordingly, if Borrower should subsequently discover that any fact that it relied upon in entering into this release was untrue, or that any understanding of the facts was incorrect, Borrower shall not be entitled to set aside this release by reason thereof, regardless of any claim of mistake of fact or law or any other circumstances whatsoever. Borrower acknowledges that it is not relying upon and has not relied upon any representation or statement made by PFG with respect to the facts underlying this release or with regard to any of such party's rights or asserted rights. Borrower acknowledges that (i) this release may be pleaded as a full and complete defense and/or as a cross-complaint or counterclaim against any action, suit, or other proceeding that may be instituted, prosecuted or attempted in breach of this release, and (ii) Borrower acknowledges that the release contained herein constitutes a material inducement to PFG to enter into this Agreement, and that PFG would not have done so but for PFG's expectation that such release is valid and enforceable in all events. Borrower hereby represents and warrants to and covenants with PFG, and PFG is relying thereon, as follows: (u) except as expressly stated in this Agreement, neither PFG nor any agent, employee or representative of PFG has made any statement or representation to Borrower regarding any fact relied upon by Borrower in entering into this Agreement; (v) Borrower has made such investigation of the facts pertaining to this Agreement and all of the matters appertaining thereto, as it deems necessary; (w) the terms of this Agreement are contractual and not a mere recital; (x) this Agreement has been carefully read by Borrower, the contents hereof are known and understood by Borrower, and this Agreement is signed freely, and without duress, by Borrower; (y) Borrower represents and warrants that it is the sole and lawful owner of all right, title and interest in and to every claim and every other matter which it releases herein, and that it has not heretofore assigned or transferred, or purported to assign or transfer, to any person, firm or entity any claims or other matters herein released; and (z) Borrower shall indemnify PFG, defend and hold it harmless from and against all claims based upon or arising in connection with prior assignments or purported assignments or transfers of any claims or matters released herein.

12. ADVICE OF COUNSEL. PFG and Borrower have prepared this Agreement and all documents, instruments, and agreements incidental hereto with the aid and assistance of their respective counsel. Accordingly, all of them shall be deemed to have been drafted by PFG and Borrower and shall not be construed against either PFG or Borrower.

13. ILLEGALITY OR UNENFORCEABILITY. Any determination that any provision or application of this Agreement is invalid, illegal, or unenforceable in any respect, or in any instance, shall not affect the validity, legality, or enforceability of any such provision in any other instance, or the validity, legality, or enforceability of any other provision of this Agreement.

14. INTEGRATION; CONSTRUCTION; ETC. This Modification, the Loan Agreement and the Existing Loan Documents (as modified) and any documents executed in connection herewith or pursuant hereto contain the entire agreement between the parties with respect to the subject matter hereof and supersede all prior agreements, understandings, offers and negotiations, oral or written, with respect thereto and no extrinsic evidence whatsoever may be introduced in any judicial or arbitration proceeding, if any, involving this Modification; provided, however, that any financing statements or other agreements or instruments filed by PFG with respect to Borrower shall remain in full force and effect. The quotation marks around modified clauses set forth herein and any differing font styles in which such clauses are presented herein are for ease of reading only and shall be ignored for purposes of construing and interpreting this Modification. This Modification is subject to the General Provisions of Section 8 of the Loan Agreement. The Existing Loan Documents are hereby amended wherever necessary to reflect the modifications set forth in this Modification. The Recitals are incorporated herein by reference.

15. Governing Law; Venue. THIS MODIFICATION SHALL BE GOVERNED BY AND SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA. Borrower and PFG submit to the exclusive jurisdiction of the State and Federal courts in Santa Clara County, California, in connection with any proceeding or dispute arising in connection herewith.

[Signature Page Follows]

PFG
Partners for Growth V, L.P.
By: _____
Name: Phil Lawson, Manager
Title: Partners for Growth V, LLC, its General Partner

BORROWER
GIGA-TRONICS INCORPORATED

By_____
President or Vice President

By_____
Secretary or Ass't Secretary

MICROSOURCE, INC.

By_____
President or Vice President

By_____
Secretary or Ass't Secretary

EXHIBIT A

SECOND AMENDED AND RESTATED WARRANTS

EXHIBIT B

REPRESENTATIONS

EXHIBIT C

REAFFIRMATION OF IPSA

Exhibit 10.25

Stock Option Award Agreement

Giga-tronics Incorporated, a California corporation, and the undersigned person (**"Optionee"**) have entered into this Stock Option Agreement effective as of the Grant Date set forth below. The Company has granted to Optionee the option (the **"Option"**) to purchase the number of shares (the **"Shares"**) of common stock, no par value, of the Company (**"Stock"**) set forth below at the per Share purchase price (the **"Exercise Price"**) set forth below, pursuant to the terms of this Award Agreement. The Option was a special inducement award and was not granted under the Company's 2005 Equity Incentive Plan, as the same may be amended, modified, supplemented or interpreted from time to time (the **"Plan"**) but is intended to incorporate all of the terms of the Plan, except as otherwise provided n this Agreement.

Optionee Name:	Lutz Henckels
Grant Date:	March 28, 2018
Vesting Commencement Date:	100,000 shares on April 1, 2019; 8,333.3 shares on the first day of each month thereafter; fully vested on April 1, 2022
Number of Shares:	400,000 (NQ)
Exercise Price:	$0.33

1. Terms of Plan. All capitalized terms used in this Award Agreement and not otherwise defined shall have the meanings ascribed thereto in the Plan. Optionee confirms and acknowledges that shares issuable upon exercise of this Option are not registered under the Securities Act of 1933 and will be "restricted securities" for federal securities law purposes. The Plan is administered by the Committee which has complete authority to make all determinations with respect to each Award, to interpret the Plan, to prescribe, amend and rescind rules and regulations relating to the Plan, to determine the terms and provisions of Award Agreements, and to make all other determinations under the Plan.

2. Nature of the Option. The Option has been granted as an inducement to become an officer and employee of to Optionee's Continuous Service, and is in all respects subject to such Continuous Service and all other terms and conditions of this Award Agreement. The Option is intended to be a **Nonstatutory (Non Qualified)** Option.

3. Vesting, Exercise and Term of Option. The Option shall vest and become exercisable during its term in accordance with the following provisions:

(a) Vesting and Right of Exercise.

(i) The Option shall vest and become exercisable with respect to 25% of the Shares at April 1, 2019, and as to 1/48th of the number of Shares in the original grant on the first day of each month thereafter until all of the Shares have vested, subject to Optionee's Continuous Service.

(ii) In the event of Optionee's death, disability or other termination of Optionee's Continuous Service, the Option shall be exercisable in the following manner:

(I) Termination of Employment: the Option ceases to be exercisable 90 days following termination of employment, during which time it shall be exercisable only to the extent exercisable at the date of termination, except that the Option shall not be exercised after its expiration date;

(II) Disability: if Optionee was in Continuous Service from the Grant Date until the date of termination of service due to disability the Option ceases to be exercisable twelve months following the date of termination of Continuous Service from disability, during which time it shall be exercisable only to the extent exercisable at the date of termination due to disability, except that the Option shall not be exercised after its expiration date; and

(III) Death: if the Optionee was in Continuous Service from the Grant Date until the date of death, the Option ceases to be exercisable twelve months following the date of death, during which time it shall be exercisable by the Optionee's estate or by a person who acquired the right to exercise the Option by bequest, inheritance or otherwise as a result of the Optionee's death only to the extent exercisable at the date of death, except that the Option shall not be exercised after its expiration date.

(IV) Vesting may be accelerated in accordance with the terms of the Plan, that in the case of a Change in Control, Acceleration in accordance with the terms of Section 8.2(a) of the Plan shall be subject to the additional condition that Mr. Henckels shall have had his employment terminated or compensation and responsibilities materially reduced in contemplation of or otherwise in connection with or as a result of the Change in Control.

(b) Method of Exercise. In order to exercise any vested portion of the Option, Optionee shall notify the Company in writing by executing and delivering the Notice of Exercise of Stock Option in the form attached hereto as Exhibit A (the **"Exercise Notice"**). The certificate or certificates representing Shares as to which the Option has been exercised shall be registered in the name of Optionee or otherwise as the Optionee may request and the Company shall permit.

(c) Restrictions on Exercise; Term of Option.

(i) Optionee may exercise the Option only with respect to Shares that have vested in accordance with Section 3(a) of this Award Agreement.

(ii) Optionee may not exercise the Option if the issuance of the Shares upon such exercise or the method of payment of consideration for such Shares would constitute a violation of any applicable federal or state securities law or other law or regulation.

(iii) The method and manner of payment of the Exercise Price will be subject to the prohibition on loans to directors and executive officers in Section 402 of the Sarbanes-Oxley Act of 2002, to the rules under Part 221 of Title 12 of the Code of Federal Regulations as promulgated by the Federal Reserve Board, and to any other applicable laws, rules or regulations.

(iv) As a condition to the exercise of the Option, the Company may require certain representations and warranties as the Company may request pursuant to Section 9.3 of the Plan. Prior to or subsequent to exercise of the Option, the Company may require the Optionee to enter into certain lock-up arrangements as provided in Section 9.4 of the Plan.

(v) Optionee may only exercise the Option upon, and the obligations of the Company under this Award Agreement to issue Shares to Optionee upon any exercise of the Option is conditioned on, satisfaction of all federal, state, local or other withholding tax obligations associated with such exercise (whether so required to secure for the Company a tax deduction or otherwise) (**"Withholding Obligations"**). The Company reserves the right to require Optionee to remit to the Company an amount sufficient to satisfy all Withholding Obligations prior to the issuance of any Shares upon any exercise of the Option. In addition, Optionee authorizes the Company to deduct any such Withholding Obligations from any payments of any kind due to Optionee (whether in connection with the Option or otherwise). The Optionee may elect to satisfy Withholding Obligations, in whole or in part, by having the Company withhold shares of Stock otherwise due to the Optionee upon exercise of the Option, or by submitting shares of Stock previously owned by the Optionee.

(vi) No fraction of a Share shall be purchasable or deliverable upon exercise of the Option, but in the event any such Shares shall include a fraction of a Share (whether due to net exercise, payment of the Exercise Price by having Shares withheld or by submitting previously owned shares, by adjustment of the Option as provided in the Plan, or otherwise), such number of Shares shall be rounded down to the nearest smaller whole number of Shares.

(vii) The Option may not be exercised more than **five** years after the Grant Date, and may be exercised during such term only in accordance with the terms of this Award Agreement.

4. Transferability of Option.

(a) The Option may be transferred by the Optionee through a gift or domestic relations order in settlement of marital property rights, and may be reacquired by the Optionee from, any "family member" as defined in and in a manner consistent with Section 6.4 of the Plan, provided that any such transfer is without payment of any value whatsoever and that no transfer shall be valid unless first approved by the Committee, acting in its sole discretion.

(b) The terms of this Award Agreement shall bind the Optionee and his or her spouse or domestic partner and the respective Permitted Transferees, executors, administrators, heirs, personal representatives and successors of the foregoing.

5. Method of Payment.

(a) Upon exercise, Optionee shall pay the aggregate Exercise Price of the Shares purchased and the Withholding Obligations by any of the following methods, or a combination thereof, at the election of Optionee:

(i) cash;

(ii) certified or bank cashier's check;

(iii) if shares of Stock are traded on an established stock market or exchange on the date of exercise, by surrender of whole shares of Stock having a Market Value equal to the portion of the Exercise Price to be paid by such surrender, provided that if such shares of Stock to be surrendered were acquired upon exercise of an Incentive Option, Optionee must have first satisfied the holding period requirements under Section 422(a)(1) of the Code;

(iv) by a "net exercise" of the Option, in which the Company will not require a payment of the Exercise Price but will reduce the number of shares of Stock issued upon the exercise by the largest number of whole shares that have a Fair Market Value that does not exceed the aggregate Exercise Price of the Shares as to which the Option is being exercised. With respect to any remaining balance of the aggregate Exercise Price, the Company will accept a cash payment from the Optionee. The number of shares of Stock underlying the Option will decrease following exercise to the extent of (i) Shares used to pay the Exercise Price of an Option under the "net exercise" feature, (ii) Shares actually delivered to the Optionee as a result of such exercise and (iii) shares withheld to pay the Withholding Obligations;

(v) if shares of Stock are traded on an established stock market or exchange on the date of exercise, pursuant to and under the terms and conditions of any formal cashless exercise program authorized by the Company entailing the sale of the Stock subject to an Option in a brokered transaction (other than to the Company); or

(vi) **[**Stock Appreciation Right. By electing to receive in cash any excess in the Market Value of any number of shares of Stock subject to available installments of the Option on the date of exercise, over the Exercise Price and related Withholding Obligations. This Stock Appreciation Right will terminate to the extent that the Option is exercised, expires or is cancelled, and the Option will terminate to the extent that this Stock Appreciation Right is exercised, expire or is cancelled.**]**

(b) Payment in Stock. If Optionee shall pay all or a portion of the aggregate Exercise Price and Withholding Obligations due upon an exercise of the Option by surrendering shares of Stock pursuant to Section 5(a)(iii), then Optionee:

(i) shall accompany the Exercise Notice with a duly endorsed blank stock power (with an appropriate signature guarantee if requested by the Company) with respect to the number of shares of Stock to be surrendered and shall deliver the certificate(s) representing such surrendered shares to the Company at its principal offices within two business days after the date of the Exercise Notice;

(ii) authorizes the Company to transfer so many whole number of Shares represented by such certificate(s) that have a Fair Market Value that does not exceed the aggregate Exercise Price for the Shares as to which the Option is being exercised. With respect to any remaining balance of the aggregate Exercise Price, the Company will accept a cash payment from the Optionee; and

(iii) may not surrender any fractional share as payment of any portion of the Exercise Price.

6. Adjustments to Option. Pursuant to Section 8.1 of the Plan, in certain cases the number of Shares covered by the Option and the Exercise Price will be proportionately adjusted if the outstanding number of shares of Stock are increased, decreased, or exchanged for a different number or kind of shares or other securities, or if additional shares or new or different shares or other securities are distributed with respect to the outstanding Stock, through merger, consolidation, sale of all or substantially all the property of the Company, reorganization, combination, recapitalization, reclassification, stock dividend, stock split, reverse stock split, or other similar distribution of the Company's equity securities without the receipt of consideration by the Company.

7. Not an Employment Contract. Nothing in the Plan or this Award Agreement shall confer upon Optionee any right to continuation of the Optionee's employment or other association with the Company or shall interfere with or restrict in any way the rights of the Company, which are hereby expressly reserved, to modify the terms of Optionee's employment or to terminate Optionee's employment at any time for any reason whatsoever, with or without cause.

8. Tax Consequences Generally. Optionee acknowledges that Optionee may suffer adverse tax consequences as a result of exercise of the Option. Optionee acknowledges that the Company advises Optionee to consult with the Optionee's tax advisers in connection with the tax implications relating to the Option including but not limited to the acquisition, disposition or transfer of the Option or of any securities or property in connection therewith, and that Optionee is not relying on the Company for any tax advice in connection therewith. Any adverse consequences incurred by an Optionee in connection with the Option, including, without limitation, from the use of shares of Stock to pay any part of the Exercise Price or any tax in connection with the exercise of the Option, and any adverse tax consequences arising from a disqualifying disposition within the meaning of Section 422 of the Code, shall be the sole responsibility of Optionee.

9. Cancellation of Option For Improper Acts of Optionee . If, at any time during the course of the Optionee's employment with the Company or any Affiliates or within six months after termination of Continuous Service, the Optionee engages in any activity in competition with any business activity of the Company or of any Affiliates, or inimical, contrary or harmful to the interests of the Company or any Affiliates, then (1) the Option and all other Awards under the Plan made to the Optionee shall terminate and be forfeited, (2) any cash, security or other property acquired by the Optionee pursuant to the Option and pursuant to all other Awards under the Plan, which cash, security or property was acquired by the Optionee during the Forfeiture Period shall be forfeited, and (3) any gain realized by the Optionee from the sale of any security acquired under the Option or any other Award during the Forfeiture Period shall be paid by the Optionee to the Company. The "Forfeiture Period" shall mean the period commencing on the Grant Date of the Option or any other Award and ending six months from termination of Continuous Service.

10. Consent of Spouse/Domestic Partner. Optionee agrees that Optionee's spouse's or domestic partner's interest in the Option is subject to this Award Agreement and such spouse or domestic partner is irrevocably bound by the terms and conditions of this Award Agreement. Optionee agrees that all community property interests of Optionee and Optionee's spouse or domestic partner in the Option, if any, shall similarly be bound by this Award Agreement. Optionee agrees that this Award Agreement is binding upon Optionee's and Optionee's spouse's or domestic partner's executors, administrators, heirs and assigns. Optionee represents and warrants to the Company that Optionee has the authority to bind Optionee's spouse/domestic partner with respect to the Option. Optionee agrees to execute and deliver such documents as may be necessary to carry out the intent of this Section 10 and the consent of Optionee's spouse/domestic partner.

IN WITNESS WHEREOF, Optionee and the Company have entered into this Award Agreement as of the Grant Date.

Optionee	**Giga-tronics Incorporated**
_____	By: _____
Lutz Henckels	John R. Regazzi
	Chief Executive Officer

Exhibit A

Notice of Exercise of Stock Option/Tandem Stock Appreciation Right

I _____ (please print legibly) hereby elect to exercise the stock options(s) identified below (the "Option(s)") granted to me by Giga-tronics Incorporated (the "Company") under its 2005 Equity Incentive Plan (the "Plan") with respect to the number of shares of Stock of the Company set forth below (the "Shares"). I acknowledge and agree that my exercise of the Option(s) is subject to the terms and conditions of the Plan and the Stock Option Award Agreement(s) governing the Option(s). Optionee confirms and acknowledges that Optionee has received and reviewed copies of the Plan and the Prospectus, dated _____, with respect to the Plan.

1. _____ Shares at $ _____ per share (Grant date of Option): _____
2. _____ Shares at $ _____ per share (Grant date of Option): _____
3. _____ Shares at $ _____ per share (Grant date of Option): _____
4. _____ Shares at $ _____ per share (Grant date of Option): _____

[OPTION EXERCISE]

I choose to pay the Exercise Price of the above option(s) as follows [please complete the numbered item(s) which apply to your exercise]:

1. **Cash:** $_____

2. **Check:** $_____ (please make checks payable to Giga-tronics Incorporated)

3. **Surrender of _____** Shares

4. Net exercise as described in Section 5(a)(iv) of the Option ☐ [if applicable check box]

I choose to pay the tax withholding relating to the exercise of the above option(s) as follows:

5. Cash: $_____

6. **Check: $_____** (please make checks payable to Giga-tronics Incorporated)

7. **Surrender of _____** Shares currently owned by Optionee

8. **Withholding of _____** Shares from Shares otherwise deliverable on exercise.

Name: _____
(please print legibly)

Signature: _____

Date: _____

Phone No: _____

EXHIBIT 20

SIGNIFICANT SUBSIDIARIES

Name	Jurisdiction of incorporation
Microsource, Inc.	California

Exhibit 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-45476, 333-34719, 333-48889, 333-39403, 333-69688 and 333-135578 on Form S-8 and 333-205051 and 333-210157 on Form S-3 of Giga-tronics Incorporated (the "Company") of our report dated June 20, 2017 relating to the financial statements, appearing in this Annual Report on Form 10-K.

/s/ Crowe Horwath LLP

San Francisco, California
June 19, 2018

Exhibit 24

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-8 (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 June 13, 2018, with respect to the consolidated balance sheet of Giga-tronics Incorporated and subsidiary as of March 31, 2018, and the related consolidated statements of operations, shareholders' equity, and cash flows for the year then ended, which report appears in the March 31, 2018 annual report on Form 10-K of Giga-tronics Incorporated.

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

June 13, 2018

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: 06/ 13 /2018

/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: 06/ 13 /2018

/s/ LUTZ P. HENCKELS
Lutz P. Henckels
Principal Accounting & Financial Officer

EXHIBIT 32.1

CERTIFICATION PURSUANT TO18 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 31, 2018, 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: 06/ 13 /2018

/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 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Lutz P. Henckels, Executive Vice President and Principal Accounting & Chief 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: 06/13/2018

/s/ LUTZ P. HENCKELS
Lutz P. Henckels
Principal Accounting & Chief Financial Officer