

MICRON SOLUTIONS, INC.

State of Incorporation:
Delaware

25 Sawyer Passway
Fitchburg, MA 01420

Telephone: (978) 345-5000
Corporate Website: www.micronsolutions.com

SIC Code: 3845

Annual Report

For the fiscal year ended December 31, 2021 (the "Reporting Period")

The number of shares outstanding of our Common Stock is 3,085,742 as of December 31, 2021.

The number of shares outstanding of our Common Stock was 2,994,007 as of December 31, 2020.

Indicate by check mark whether the company is a shell company (as defined in Rule 405 of the Securities Act of 1933 and Rule 12b-2 of the Exchange Act of 1934):

Yes: No:

Indicate by check mark whether the company's shell status has changed since the previous reporting period:

Yes: No:

Indicate by check mark whether a change in control of the company has occurred over this reporting period:

Yes: No:

Disclosure Regarding Forward-Looking Statements

Forward-looking statements made herein are based on current expectations of Micron Solutions, Inc. (“our” or the “Company” or Micron Solutions”) that involve a number of risks and uncertainties and should not be considered as guarantees of future performance. The factors that could cause actual results of operations, financial condition and business operations to differ materially include, but are not limited to, our ability to obtain and retain order volumes from customers who represent significant proportions of net sales; our ability to maintain our pricing model, offset higher costs with product price increases and/or decreases to our cost of sales; variability of customer delivery requirements and the ability to anticipate and respond thereto; the level of and ability to generate sales of higher margin products and services; our ability to manage our level of debt which higher debt levels could make the Company sensitive to the effects of economic downturns and limit our ability to react to changes in the economy or our industry; failure to comply with financial and other covenants in our credit facility; the impact on the Company’s operations and financial results due to economic uncertainty and disruption including, but not limited to, the COVID-19 pandemic; reliance on revenues from exports and impact on financial results due to economic uncertainty or downturns in foreign markets; volatility in commodity and energy prices and our ability to offset higher costs and inflation with price increases; continued availability of labor, supplies, and raw materials and components used in manufacturing at competitive prices; variations in the mix of products sold; maintaining regulatory quality standards applicable to our manufacturing and quality processes; and the amount and timing of investments in capital equipment, sales and marketing, engineering and information technology resources. The COVID-19 pandemic has affected adversely, and is expected to continue to affect adversely, our operations, supply chains, financial condition and results of operations, and we have experienced and expect to continue to experience unpredictable reductions in demand for certain of our services. During the current COVID-19 pandemic, the Company has experienced reduced sales, supply chain disruption, product shipping disruptions, reduced customer demand and reduced availability of workforce. We assume no obligation to update these forward-looking statements contained in this report, whether as a result of new information, future events, or otherwise. The current conflict between Russia and Ukraine is adversely affecting commodity prices. The duration and the level of impact on pricing and on the availability of raw materials is unknown. The Company has neither customers nor suppliers based in either Russia or Ukraine.

PART A – GENERAL COMPANY INFORMATION

Item 1 The Exact Name of the Issuer and its Predecessor

Exact name of the issuer: Micron Solutions, Inc.
Name of predecessor: Arrhythmia Research Technology, Inc. (Until March 24, 2017)

Item 2 The Address of the Issuer’s Principal Executive Offices

25 Sawyer Passway
Fitchburg, MA 01420
Phone: (978) 345-5000
Fax: (978) 342-0168
Website: www.micronsolutions.com
Investor Relations:
Glen Bunnell, CFO
Email: gbunnell@micronsolutions.com
Phone: (978) 345-5000

Item 3 The Jurisdiction and Date of the Issuer’s Incorporation or Organization

The Company was originally incorporated under the name Arrhythmia Research Technology, Inc. under the laws of the State of Louisiana in 1981 and reincorporated under the laws of the State of Delaware on June 12, 1987. The Company changed its name to Micron Solutions, Inc. in March 2017.

PART B – SHARE STRUCTURE

Item 4 The Exact Title and Class of Securities Outstanding

Micron Solutions has one class of outstanding stock:

Title: Common Stock, par value \$0.01

CUSIP: 59511X

OTCQB Trading Symbol: MICR

Micron Solutions has issued options and warrants to purchase shares of its common stock, of which, 341,500 were still outstanding as of December 31, 2021. No shares of preferred stock are currently outstanding.

Item 5 Par or Stated Value and Description of the Security

The following description of our capital stock and certain provisions of the Certificate of Incorporation, as amended, and the By-Laws is a summary and is qualified in its entirety by reference to the provisions of the Certificate of Incorporation and the By-Laws, copies of which are available upon request:

Common Stock

The Company’s outstanding securities consist solely of shares of common stock, par value \$0.01 per share. The Company’s Certificate of Incorporation, as amended (the “Certificate of Incorporation”) authorizes 10,000,000 shares of common stock. The holders of common stock are

entitled to one vote per share on all matters submitted to a vote of the stockholders. Holders of common stock do not have cumulative voting rights. Therefore, holders of more than 50% of the shares of common stock are able to elect all of the Company's directors eligible for election in a given year. The holders of common stock are entitled to dividends if declared by the Company's board of directors (the "Board of Directors"). There are no redemption or sinking fund provisions applicable to the common stock, and holders of common stock are not entitled to any preemptive rights with respect to additional issuances of common stock by the Company.

Upon liquidation, dissolution or winding up of the Company, the remaining assets legally available for distribution to stockholders, after payment of claims of creditors and payment of liquidation preferences, if any, on outstanding preferred stock, are distributable ratably among the holders of the common stock and any participating preferred stock outstanding at that time.

Preferred Stock

The Certificate of Incorporation also authorizes 2,000,000 shares of preferred stock, par value \$0.001 per share. The Company may issue these shares of preferred stock without the approval of the holders of common stock. The Board of Directors has the discretion to issue the preferred stock in such series and with such preferences and rights as it may designate, including, among other things, dividend rights, voting rights, conversion rights and liquidation rights as well as redemption or sinking fund provisions.

The purpose of authorizing the Board of Directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a shareholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of the Company's outstanding voting stock. Additionally, the issuance of preferred stock may adversely affect the holders of the Company's common stock by restricting dividends on the Company's common stock, diluting the voting power of the Company's common stock or subordinating the liquidation rights of the Company's common stock. As a result of these or other factors, the issuance of preferred stock could have an adverse impact on the market price of the Company's common stock.

As of the date of this annual report there are no shares of preferred stock issued and outstanding.

Item 6 The Number of Shares or Total Amount of the Securities Outstanding for Each Class of Securities Authorized

As of December 31, 2021					
Class	Number of Shares Authorized	Number of Shares Outstanding	Freely Tradable Shares (Public Float)	Total Number of Beneficial Stockholders	Total Number of Stockholders of Record
Common Stock	10,000,000	3,085,742	1,746,051	709	174
As of December 31, 2020					
	Number of Shares Authorized	Number of Shares Outstanding	Freely Tradable Shares (Public Float)	Total Number of Beneficial Stockholders	Total Number of Stockholders of Record
Common Stock	10,000,000	2,994,007	1,761,782	659	177

Item 7 The Name and Address of the Transfer Agent

Transfer Agent: Continental Stock Transfer & Trust Company
1 State Street, 30th Floor
New York, New York 10004.
Telephone: 212-509-4000

Continental Stock Transfer & Trust Company is registered under the Securities Exchange Act 1934, as amended, and is an authorized transfer agent subject to regulation by the SEC.

PART C – BUSINESS INFORMATION

Item 8 The Nature of the Issuer’s Business

Micron Solutions[®], Inc., a Delaware corporation (“Micron Solutions”), through its wholly-owned Massachusetts operating subsidiary, Micron Products[®], Inc. (“Micron” and together with Micron Solutions, the “Company”), is a diversified contract manufacturing organization (“CMO”) that produces medical devices, military, and consumer components and assemblies requiring precision machining and custom injection molding.

The Company was originally incorporated as Arrhythmia Research Technology, Inc. in the State of Louisiana in 1981 and reincorporated under the laws of the State of Delaware on June 12, 1987. The Company changed its name to Micron Solutions, Inc. in March 2017. The Company’s fiscal year ends on December 31. As of December 31, 2021, the Company had a total of 108 employees, of which 102 were full time employees. Micron Solutions’ common stock trades on the OTCQB Venture Markets tier under the symbol “MICR”. Trading on the OTCQB began on April 6, 2020 after the Company’s voluntary delisting from the NYSE American. The Company has never been in bankruptcy, receivership, or any similar proceeding.

Micron’s primary SIC code is 3845 (Electromedical and Electrotherapeutic Apparatus). Micron has never been a “shell company” as defined under the Securities Act of 1933, as amended.

Item 9 The Nature of Products or Services Offered

Overview

Micron Solutions operating through its wholly-owned Massachusetts operating subsidiary, Micron Products, is a diversified contract manufacturing organization (“CMO”) that produces medical devices, military, automotive, and consumer components and assemblies requiring precision machining and custom injection molding.

Micron provides design, engineering, quality and regulatory expertise across the Company’s three product lines, machining, thermoplastic injection molding and sensors, with fulfillment systems using proprietary manufacturing processes to enable the Company’s customers to be competitive. The Company competes globally, with approximately 46% of its revenue derived from exports.

Contract Manufacturing

Machining

The Company is a contract manufacturer of machined components, primarily for original equipment manufacturers (OEMs) in the medical device industry as well as the defense industry. The Company machines components for implants and instruments for medical devices including large joint replacements, wrist plates, rib fixation plates, and screws. Specialized components used in Total Knee Arthroscopy including femoral surface replacements, tibia trays, ultra-high-molecular-weight polyethylene (“UHMWPE”) inserts, trials and instrumentation as well as hip stems and fixation plates used in rib and wrist fractures are fabricated, machined

and polished, heat treated and passivated at Micron's state of the art facility in Fitchburg, Massachusetts. The manufacturing process includes computer aided design ("CAD"), computer-aided manufacturing ("CAM"), and computer numerical controlled ("CNC") machining. The Company deploys the latest technologies in computer-aided design, computer aided manufacturing (CAD/CAM) methodology, and up to 11-axis CNC vertical milling, mill-turning and wire electrical discharge machining ("EDM"). Additional capabilities include laser marking, automated polishing, passivation, and coatings. The Company also offers contract inspection and packaging in its own clean room facilities.

Thermoplastic Injection Molding

The Company's custom thermoplastic injection molding services meet the needs of customers who require very high-quality parts, clean room molding, in-cycle vision inspection, assembly and packaging to tight tolerances using engineered materials. The Company adds value with highly repeatable and reliable manufacturing with ongoing innovations for cost improvements.

Other Products and Services

The Company provides its customers with key value-added services, including the design, manufacture, and rehabilitation of injection molding tools. These capabilities leverage significant cost savings and speed by vertically integrating mold making and repair into the Company's sensor and thermoplastic injection molding businesses. The Company's engineers and mold designers work with customers' product development engineers to design and produce unique tooling for their products.

Other value-added services include pad printing, ultrasonic welding, stamping, laser marking, clean room molding, clean room assembly, specialty coatings, plastic machining, and high-precision optical and CMM metrology.

Sensors

Micron is a leading manufacturer and distributor of silver plated and non-silver plated conductive resin sensors for use in the manufacture of disposable electrodes for electrocardiogram ("ECG") diagnostic, monitoring and related instrumentation. Micron's sensors consist of a molded plastic substrate plated with a silver/silver chloride surface, which is a highly sensitive conductor of electrical signals. Silver/silver chloride-plated disposable electrodes are utilized in coronary care units, telemetry units, and for other monitoring purposes.

Micron also manufactures sensors and conductive plastic studs used in the manufacture of radio translucent electrodes. The radio translucent conductive plastic studs are manufactured with uniquely engineered resin to enable electrical conductivity between the sensor and the recording instrument without the use of a metal snap. Other custom designed sensors are manufactured for specific unique applications in the electroencephalogram (EEG), electro-muscular stimulation (EMG) or thermo-electrical neural stimulation (TENS) markets.

Customers and Net Sales

The Company offers its products and services to customers of all sizes, including large OEM's and other contract manufacturing organizations. The Company manufactures products upon receipt of purchase orders.

During the year ended December 31, 2021, the Company had net sales to three customers each constituting between 10 to 14% of total net sales. Accounts receivable from these three customers at December 31, 2021 aggregated 33% of the total accounts receivable balance. During the year ended December 31, 2020, the Company had net sales to four customers each constituting between 10 to 13% of total net sales. Accounts receivable from these four customers at December 31, 2020 aggregated 40% of the total accounts receivable balance.

During the year ended December 31, 2021, approximately 74% of the Company's net sales were to customers in the medical device industry. During the year ended December 31, 2020, medical device net sales were approximately 71% of total net sales. The Company also had net sales to customers in the automotive, industrial, consumer products, and military and law enforcement industries.

The Company competes globally, with approximately 46% of its revenue derived from exports in 2021.

While some risks exist in foreign markets, the Company's customers have historically been based in stable regions. Accounts receivable insurance is used where available and appropriate to reduce risk in these markets.

Marketing and Competition

The Company's U.S. based contract manufacturing capabilities are offered globally to the medical, defense and automotive markets. Core competencies include, FDA, ITAR PPAP, ATF compliance, speed to market for high precision, tight tolerance injection molded parts, molding tools, CNC machining, assembly service and specialty packaging. The Company develops long-term value-based relationships based upon highly personalized interactions with our clients. The Company utilizes a proprietary process for new product launches for complex engineered products. Many of these products require specialty material, such as engineered resins, exotic metals, secondary coatings and polishing processes, complex automation and metrology equipment. The Company has an experienced engineering and technical team that leverages decades of process knowledge and lean manufacturing principles. To remain competitive, the Company continuously invests in training and education for its workforce, in automation and specialty software for enterprise resource planning and in quality systems management.

The Company's sales force is comprised of direct sales and independent sales representatives. As part of a total marketing and sales strategy the Company continually invests in website enhancements, social media campaigns and software tools together with a variety of internet marketing and lead generation programs.

The Company competes primarily against one other manufacturer in the sensors market and against a multitude of contract manufacturers for its other product lines.

Manufacturing and Suppliers

The Company has registered its facilities with the U.S. Food and Drug Administration ("FDA") and has an ITAR registration with the U.S. State Department. It is ISO 13485:2003 registered and compliant to 21CFR part 820. The Company is also a licensed ATF manufacturer with the Bureau of Alcohol, Tobacco, Firearms and Explosives. Injection molding capabilities include ISO class 7 clean room manufacturing. Machining, mold making and tooling capabilities include up to 11 axis CNC machining, wire electrical discharge machining ("EDM"), milling, turning, grinding, polishing, cleaning, passivation, assembly and packaging. Surface coating capabilities include electroless and electrolytic silver plating. A skilled employee base provides expertise in engineering, complex manufacturing, materials, process control, quality and automation.

The Company uses commodity raw materials as the basis for its value-added manufacturing operations. Many of these commodities are widely available from multiple sources. The Company monitors the supply chain for commodity materials to manage availability in case of breaks in the global supply chain.

Due to the outbreak of the COVID-19 virus and the related disruptions within the transport sector, the Company closely monitors lead times and availability of material so that it may make adjustments to mitigate risk that COVID-19 has introduced in the supply chain.

The current conflict between Russia and Ukraine is adversely affecting commodity prices. The duration and the level of impact on pricing and on the availability of raw materials is unknown. The Company has neither customers nor suppliers based in either Russia or Ukraine.

Patents and Proprietary Technology

The Company develops and utilizes proprietary manufacturing processes to establish and maintain a competitive advantage. With internal engineering, mold making, automation and manufacturing expertise, the Company has developed specialized processes throughout the product development and product manufacturing cycle. In July 2018, the Company was awarded a U.S. Patent for an invention which improves the high-low pressure system in 40MM M212 casing used in military, law enforcement and other markets. Under a multi-year exclusive supply agreement with a Company's customer, the patent rights and obligations are shared equally.

Government Regulation

The Company's operations are subject to government regulations which establish compliance standards. The FDA and the European Union equivalent ("CE Mark") promulgate quality systems requirements under which a medical device is to be developed, validated and manufactured. The DOD, Bureau of Alcohol,

Tobacco, Firearms and Explosives (ATF) and the State Department impose regulations on the production and transfer of certain goods and technical data. The development or manufacture of such products must be managed in accordance with applicable regulatory requirements and special controls required by customers. The Company's manufacturing facilities are subject to periodic inspections by the FDA and other agencies to determine compliance with regulations and other requirements.

Environmental Regulation

The Company's operations involve use of hazardous and toxic materials and generate hazardous, toxic, and other regulated wastes. Its operations are subject to federal, state, and local laws, regulations and directives governing the use, storage, handling and disposal of such materials and certain waste products. Micron has developed an internal system of compliance as well as retained independent environmental consulting firms to regularly review, monitor and upgrade its air and waste water treatment facilities. The Company has introduced several new environmental initiatives including the use of solar energy and energy efficient machinery and lighting to benefit from renewable energy generation and reduce overall costs associated with production. The Company employs industry best practices to reduce waste from its manufacturing operations and reclaims, recovers, and reuses materials to reduce pollutants and to minimize the impact on the environment.

Employees

As of December 31, 2021, the Company had a total of 108 employees, of which 102 were full time employees.

Available Information

The Company's common stock current trades on the OTCQB Venture markets under the symbol "MICR". The Company makes available certain information about the Company, including this annual report and its quarterly reports, through the OTC's website at www.otcm Markets.com.

Item 10 The Nature and Extent of the Issuer's Facilities

Micron Solutions' facilities are located at 25 Sawyer Passway in Fitchburg, MA. It occupies two buildings, each containing both administrative offices and manufacturing and manufacturing support areas.

On May 14, 2021, the Company executed a purchase and sale agreement (the "P&S") for the sale and leaseback of the Company's main manufacturing facility. The triple net lease on the Company's 83,093 square foot facility has a ten-year term with four five-year extension options and initial rent of \$31,506 per month.

PART D – MANAGEMENT STRUCTURE AND FINANCIAL INFORMATION

Item 11 Company Insiders (Officers, Directors and Control Persons)

Directors and Executive Officers

The current directors and executive officers of the Company are as follows:

Name	Age	Title
Jason R. Chambers	44	Director
William J. Laursen	51	President, Chief Executive Officer and Director
Marco F. Benedetti	62	Director
Rodd E. Friedman	55	Director
Andrei Soran	62	Chairman of the Board
Glen R. Bunnell	55	Chief Financial Officer, Treasurer and Secretary

Set forth below are descriptions of the backgrounds of the executive officers and directors of the Company and their principal occupations for the past five years.

Jason R. Chambers, c/o Micron Solutions, 25 Sawyer Passway, Fitchburg, MA 01420. Mr. Chambers has served as a director of the Company since 2006. He served as Chairman of the Board from July 2016 through May 2019. Mr. Chambers has served as VP Business Development of DS Services of America, Inc., from January 2020 to present. Mr. Chambers previously served as President of Mountain Brook Water, a water bottling and distribution company, from 2002 to 2019, and from 2001 to present has served as a consultant assisting The Chambers Medical Foundation, a private foundation (the "Foundation"), in assessing medical grant applications. Mr. Chambers was appointed Trustee of the Foundation in 2011. Mr. Chambers holds a Bachelor of Science degree from Vanderbilt University School of Engineering and a Masters of Business Administration degree from Owen Graduate School of Management, Vanderbilt University with a concentration in finance and marketing.

Mr. Chambers brings over 15 years of practical business and finance experience as a president and vice president of growing enterprises, with knowledge of and relationships with the medical community through his non-profit activities. His advanced degree in business administration and finance experience qualify him to serve on the Company's Audit Committee.

William J. Laursen, Micron Solutions, 25 Sawyer Passway, Fitchburg, MA 01420. Mr. Laursen has served as the Company's President, Chief Executive Officer and Director since November 28, 2018. From January 2012 to November 2018 he was the Executive Vice President, Sales and Strategy of The Coghlin Companies, Inc., a privately held, time to market services company, offering engineering, prototyping and contract manufacturing of complex electro-mechanical and electro-optical devices and equipment for a variety of markets including military and medical devices. From April 2003 until October 2009, Mr. Laursen served as President and BOA member for M2 America Corp. an engineering and manufacturing firm focused on Optical media manufacturing equipment. Since 2009, Mr. Laursen has also been a principal of MAKS, LLC, a project oriented company that provides strategic planning, business development and systems implementation.

Mr. Laursen brings over 25 years of experience focused on innovation in highly automated manufacturing environments in many industries such as medical devices, instrumentation, plastics, consumables and consumer products as well as experience in contract manufacturing. His expertise in business development, sales and marketing, strategic development and operations make him well suited to serve as a member of the Board of Directors. As the only management representative on the Company's Board, Mr. Laursen provides an insider's perspective to the Board about operations and strategy of the Company.

Marco F. Benedetti, c/o Micron Solutions, 25 Sawyer Passway, Fitchburg, MA 01420. Mr. Benedetti has served as a director since July 2015. Mr. Benedetti is currently Chief Financial Officer of Harmac Medical Products, Inc, an innovative, full service contract manufacturer of single-use medical devices. Prior to Joining

Harmac in 2021, Mr. Benedetti served seven years at Canisius College, a private college based in western New York with 4,000 full time students and a \$100 million annual operating budget. Prior to joining Canisius College in 2013, Mr. Benedetti served nearly ten years at Greatbatch, Inc., a publicly-traded global manufacturer of components for medical devices for a variety of applications. He held a number of senior financial roles there, including Vice President of Finance - Financial Planning and Analysis, Investor Relations and Treasurer. Before that, Mr. Benedetti held senior finance positions at Ashton-Potter, U.S.A. LTD and International Imaging Materials, Inc. Mr. Benedetti is a certified public accountant and began his career at KPMG, LLP. He received a Masters of Business Administration and a Bachelor of Science in Business Administration from the State University of New York at Buffalo.

Mr. Benedetti brings over 30 years of financial and operational experience from medical device manufacturing, technology printing and public auditing. During that time, he built and led global operational, accounting and finance teams, directed strategic planning initiatives, analyzed and supported multiple acquisitions, identified growth and efficiency opportunities, and drove financial results. His advanced degree in business administration, and finance experience, qualify him to serve as a member of the Company's Audit Committee.

Rodd E. Friedman, c/o Micron Solutions, 25 Sawyer Passway, Fitchburg, MA 01420. Mr. Friedman has served as a director of the Company since his appointment on July 21, 2017. Mr. Friedman is the founder and managing member of REF Securities & Co. ("REF"), a private investment firm. Mr. Friedman, through REF, has been principally engaged in investing in public and private equities and derivatives since 1991. Prior to founding REF, Mr. Friedman was employed as an options trader at O'Connor and Associates, a market maker on the American Stock Exchange. Mr. Friedman received a Bachelor of Science in Finance from NYU Stern School of Business.

Mr. Friedman brings a background in finance with over 25 years of experience investing in private and publicly traded companies, including conducting due diligence, analyzing financial statements and assessing strategic options, which qualify him to serve as a director of the Company.

Andrei Soran, c/o Micron Solutions, 25 Sawyer Passway, Fitchburg, MA 01420. Mr. Soran has served as a director of the Company since December 8, 2017. He was elected to Chairman of the Board at the Company's May 23, 2019 Annual Meeting. Mr. Soran serves as CEO of Pipeline Health, a Healthcare company operating Hospitals and medical facilities in California, Illinois and Texas. Prior to his position at Pipeline Health, Mr. Soran served from May 2018 to September 2019 as CEO of Trident USA Health, the largest provider of mobile diagnostic services in Post Acute Care. He also served as the CEO of Novaseek Research, Inc. ("Novaseek"), since August 2017. Novaseek is a provider of cloud-based Clinical Data Network for Research ("CDNR") services. Before Novaseek, he served from July 2016 to July 2017 as COO, and then CEO of Verity Health Systems, a five-hospital, \$1.4 billion Net Revenues California based healthcare network. Mr. Soran previously served from July 2014 to April 2016 as COO and Executive VP at Tenet Healthcare Corporation's ("Tenet") Detroit Medical Center. Before Tenet, from April 2006 to June 2013, Mr. Soran served as CEO of Framingham, Massachusetts based MetroWest Medical Center, a Vanguard Health Systems facility. Tenet acquired Vanguard in 2013. Mr. Soran holds a Bachelor's degree in Physical Therapy from Tel Aviv University in Israel and a Master's degree in Business Administration and Management from Boston University-Metropolitan College.

Mr. Soran brings over 20 years of experience in hospital operations, strategy, and long-term planning, with the medical and medical device community and corporate financial and operational restructuring and private equity, making him well suited to serve as a director of the Company.

Glen R. Bunnell. Mr. Bunnell has served as the Chief Financial Officer, Treasurer and Principal Accounting and Financial Officer of the Company since September 7, 2021. Mr. Bunnell brings over 30 years of strategic financial management in the life sciences, technology and manufacturing industries, most recently serving since April 2019 as Chief Financial Officer of BostonSight, a non-profit healthcare organization, research center and manufacturing laboratory based in Needham, Massachusetts. Prior to this position, Mr. Bunnell has served as an independent consultant from 2016 to 2019, and from 2005 to 2016 at Charles River Laboratories with his last position as Vice President of Finance. Mr. Bunnell holds a Bachelor's degree in Finance from Bentley University and a Master's degree in Business Administration from Babson College.

Director Compensation

For fiscal year 2021, each non-employee director was entitled to receive annual compensation of \$58,400 in either cash or the cash equivalent in shares of the Company's common stock or a combination thereof. Additionally, Mr. Soran received an additional \$20,020 for his service as Chairman of the Board and Mr. Benedetti received an additional \$10,010 for his service as chairman of the audit committee. Directors who are full time employees receive no compensation for serving as directors. The non-employee directors who were serving in such capacity in 2021 received the following fees for the year ended December 31, 2021:

Name	Non-Equity				Nonqualified Deferred Compensation Earnings	All Other Compensation (\$)	Total (\$)
	Fees Earned or Paid in Cash (\$) ⁽¹⁾	Stock Awards (\$) ⁽²⁾	Option Awards (\$) ⁽³⁾	Incentive Plan Compensation (\$)			
Jason R. Chambers	25,000	33,400	—	—	—	—	58,400
Marco F. Benedetti	30,000	38,410	—	—	—	—	68,410
Rodd E. Friedman	25,000	33,400	—	—	—	—	58,400
Andrei Soran	35,000	43,420	—	—	—	—	78,420

(1) Includes amounts earned from the annual retainer and chairperson fees, prorated for partial year service as appropriate.

(2) Represents the aggregate grant date fair value computed in accordance with ASC Topic 718 for awards of stock granted under the 2019 Equity Incentive Plan. Fair value of the stock awards was determined using the closing price per share of the Company's common stock on the grant date.

(3) As of December 31, 2021, each Director held the following number of outstanding options to purchase the Company's common stock: Mr. Chambers held 7,500 options; Mr. Benedetti held 7,500 options; Mr. Friedman did not hold any options; and Mr. Soran did not hold any options.

Executive Officers Compensation

As CEO of Micron Solutions, Inc., William J. Laursen was compensated \$376,279 in wages and bonuses during the year ended December 31, 2021. On January 1, 2021, Mr. Laursen was granted restricted stock units (RSU's) for 7,778 shares of common stock, vesting monthly over a one-year period. Mr. Larsen has an employment agreement with the Company that provides payments for up to 18 months upon a change of control and contains certain non-competition and non-solicitation restrictions

Glen R. Bunnell has served as CFO since September 7, 2021. As CFO of Micron Solutions, Inc., he was compensated \$66,856 in wages during the year ended December 31, 2021. Mr. Bunnell was granted options for 15,000 shares of common stock, vesting over a four-year period with an exercise price equal to the fair market value on the date of such grant. Mr. Bunnell has an employment agreement with the Company that provides for payments for up to 18 weeks upon a change of control and contains certain non-competition and non-solicitation restrictions. Mr. Bunnell's annual salary is \$220,000.

In addition to their eligibility to receive equity awards under the Company's 2019 Equity Incentive Plan, Mr. Laursen and Mr. Bunnell are eligible to participate in the Company's Key Employee Stock Purchase Plan, which is further described in Note 10 to the Company's Consolidated Financial Statements for the fiscal year ended December 31, 2021 under the heading "Key Employee Stock Purchase Plan", which is included in this Annual Report. Mr. Laursen participated in the Key Employee Stock Purchase Plan, purchasing 16,835 shares in 2021 and 20,614 shares in 2020.

Number and Class of the Issuer's Securities Beneficially Owned by The Company's Directors and by Executive Officers

The following table shows the securities owned by each director, the CEO and CFO, and by all of the current executive officers and directors as a group as of December 31, 2021.

Name and Address of Beneficial Owner	Common Stock Beneficially Owned ⁽¹⁾	Percent of Class ⁽¹⁾
Rodd E. Friedman (Director)	444,618 ⁽²⁾	13.6%
Andrei Soran (Chairman)	278,713 ⁽³⁾	8.7%
Jason R. Chambers (Director)	167,562 ⁽⁴⁾	5.2%
Glen R. Bunnell (CFO)	16,995	*%
Marco F. Benedetti (Director)	47,167 ⁽⁵⁾	1.5%
William J. Laursen (Director and CEO)	164,184 ⁽⁶⁾	5.1%
All Executive Officers and Directors as a Group (6 Persons)	1,119,239 ⁽⁷⁾	34.7%

*Less than 1%

- (1) Unless otherwise noted in these footnotes, the Company believes that all shares referenced in this table are owned by each person named as beneficial owner and that each person has sole voting and dispositive power with respect to the shares of Common Stock owned by each of them. In accordance with Rule 13d-3 under the Exchange Act, each person's percentage ownership is determined by assuming that the options and warrants to purchase common stock that are held by that person, and which are exercisable within 60 days of December 31, 2021, have been exercised. The address of all persons listed above is c/o Micron Solutions, Inc., 25 Sawyer Passway, Fitchburg, MA 01420.
- (2) Rodd E. Friedman, the managing partner and majority owner of REF Securities, has sole voting and dispositive power over 424,618 shares of common stock held by REF Securities and 20,000 shares issuable upon exercise of warrants
- (3) Includes 10,000 shares issuable upon exercise of warrants
- (4) Includes 17,500 shares issuable upon exercise of options and warrants
- (5) Includes 7,500 shares issuable upon exercise of options.
- (6) Includes 120,778 shares issuable upon exercise of options.
- (7) Includes 175,778 shares of the Company's common stock that executive officers and directors have the right to acquire upon exercise of stock options and warrants that are currently exercisable or exercisable within 60 days of December 31, 2021.

The following table shows, to the best of the Company's knowledge, all persons known to be beneficial owners of five percent or more of the voting securities of the Company as of December 31, 2021.

Name and Address of Beneficial Owner	Common Stock Beneficially Owned ⁽¹⁾	Percent of Class ⁽¹⁾
REF Securities & Co. Rodd Friedman 12 South Main Street, Suite 203 Norwalk, CT 06854	444,618 ⁽²⁾	13.8%
Chambers Medical Foundation Edwin K. Hunter, Trustee 1807 Lake Street Lake Charles, LA 70601	296,268 ⁽³⁾	9.6%
Steven D. Heineman 1123789 Indian Road North Palm Beach, FL 33408	396,230 ⁽⁴⁾	12.8%
Andrei Soran MLPF&S Cust FPO Andrei Soran IRA The Andrei Soran Trust, Andrei Soran Trustee, Ilana Soran, Trustee, 11/15/2013 c/o Micron Solutions, Inc. 25 Sawyer Passway Fitchburg, MA 01420	278,713 ⁽⁵⁾	8.7%
Jason R. Chambers 1266 West Paces Ferry RD, NW Suite 461 Atlanta, GA 30327	167,562 ⁽⁶⁾	5.2%

(1) The table that appears in Item 14 above and the table that appears in Item 11 above is based upon the best information available to the Company as of the date of this Annual Report. Unless otherwise noted in these footnotes, the Company believes that all shares referenced in this table are owned of record by each person named as beneficial owner and that each person has sole voting and dispositive power with respect to the shares of Common Stock owned by each of them. Each person's percentage ownership is determined by assuming that the options and warrants to purchase common stock that are held by that person, and which are exercisable within 60 days of December 31, 2021, have been exercised.

(2) Rodd E. Friedman, the managing partner and majority owner of REF Securities, has sole voting and dispositive power over 424,618 shares of common stock held by REF Securities and 20,000 shares issuable upon exercise of warrants.

(3) The Chambers Medical Foundation ("Foundation"), such Trustee has sole voting and dispositive power with respect to 296,268 shares of common stock.

- (4) Mr. Heinemann has sole voting and dispositive power with respect to 396,230 shares of common stock.
- (5) Mr. Soran holds sole voting and dispositive powers to 268,713 shares of common stock. Additionally, Mr. Soran holds 10,000 warrants to purchase common stock
- (6) Mr. Chambers holds sole voting and dispositive powers to 157,562 shares. Additionally, Mr. Chambers holds 17,500 options and warrants to purchase common stock.

Certain Relationships and Related Transactions

Sale-leaseback

On May 14, 2021, the Company executed a purchase and sale agreement (the “P&S”) for the sale and leaseback of the Company’s main manufacturing facility. The agreement was made with an entity that is controlled by certain members of the Company’s Board of Directors. On June 3, 2021, the Company completed the sale and leaseback transaction, with the Company realizing proceeds of \$3.9 Million which was partially used to pay off all outstanding indebtedness with its former bank lender on June 4, 2021, as well as pay off the subordinated notes payable. The triple net lease on the Company’s 83,093 square foot facility has a ten-year term with four five-year extension options and initial rent of \$31,506 per month.

Subordinated promissory notes

In June 2019, the Company initiated a private offering to raise up to \$500,000 and sold an aggregate of \$500,000 in subordinated promissory notes with a maturity date of July 5, 2022, and an interest rate equal to 10% per annum from the date of issuance. On June 3, 2021, the P&S for the sale and leaseback of the Company’s main manufacturing facility was finalized and the Company realized proceeds of \$3.9 Million which was applied to pay off the bank debt and subordinated notes.

For every \$50,000 in principle invested in the notes, each investor received a warrant to purchase 10,000 shares of common stock (collectively, the “Warrants”). The Warrants are exercisable at an exercise price equal to \$2.90 per share, namely, the average closing market price of the Company’s common stock on the fifteen days prior to the date of the Warrant, plus 12% and expire in July 2022. The Warrants contain standard provisions relating to anti-dilution adjustments for stock splits and recapitalizations. The Warrants also provide the investors with standard piggy-back registration rights in the event the Company files a registration statement (other than a registration statement on Form S-4 or S-8) to register the shares of common stock subject to standard limitations in the discretion of any underwriter.

Related parties participated in the private offering as follows:

Jason Chambers, Director	\$	50,000
Rodd Friedman, Director	\$	100,000
Andrei Soran, Chairman	\$	50,000

Item 12 Financial Information for the Issuer’s Most Recent Fiscal Period

See Micron Solutions, Inc., and Subsidiary Consolidated Financial Statements for the Years Ended December 31, 2021 and December 31, 2020. The financial statements are included at the end of this Annual Report and were prepared in accordance with accounting principles generally accepted in the United States (“GAAP” or “US GAAP”)

The financial statements required by this Item 12 can be found on the following pages of Micron Solutions, Inc., and Subsidiary Consolidated Financial Statements for the Years Ended December 31, 2021 and December 31, 2020 and are incorporated by reference herein:

Financial Statement	Micron Solutions, Inc., and Subsidiary Consolidated Financial Statements for the Years Ended December 31, 2021 and 2020 - Page References
Consolidated Balance Sheets	F-4
Consolidated Statements of Income	F-5
Consolidated Statements of Shareholders' Equity	F-6
Consolidated Statements of Cash Flows	F-7
Notes to Consolidated Financial Statements	F-8 to F-22

Item 13 Similar Financial Information for Such Part of the Two Preceding Fiscal Years as the Issuer or its Predecessor Has Been in Existence

The Company's audited consolidated financial statements for the two preceding fiscal periods are included in the Company's Annual Report filing for the fiscal year ended December 31, 2021, referenced in Item 12 above and in the Company's Annual Report Filing for the fiscal year ended December 31, 2020 which was filed with the OTC Markets on March 31, 2021. The filed reports can be accessed at www.otcmarkets.com and are incorporated by reference in this Annual Report. The audited consolidated financial statements include the: (i) consolidated balance sheet; (ii) consolidated statements of income; (iii) consolidated statements of cash flows; (iv) consolidated statements of stockholders' equity; (v) notes to consolidated financial statements; and (vii) report of independent registered public accounting firm.

Item 14 The Name, Address, Telephone Number, and Email Address of Each of the Advisors to the Issuer on Matters Relating to Operations, Business Development and Disclosure:

Securities Counsel: Arent Fox Schiff LLP
The Prudential Tower
800 Boylston Street, 32nd Floor
Boston, MA 02199
Telephone: 617-973-6197
thomas.brennan@arentfox.com

Auditor: Wolf & Company, P.C.
255 State Street
Boston, MA 02109
Telephone: 617-439-9700
rgorman@wolfandco.com

Tax Accountant: BDO
One International Place

Boston, MA 02110
Telephone: 617-422-7553
krochester@bdo.com

Preparation of Micron Solution's consolidated financial statements is the responsibility of the Company. Micron's independent auditors, Wolf and Company, PC, are responsible for expressing an opinion on these consolidated financial statements based on its audits.

Item 15 Management's Discussion and Analysis or Plan of Operation

The following discussion of the Company's results of operations and financial condition should be read in conjunction with the consolidated financial statements and notes pertaining to them that appear elsewhere in this Annual Report. Any forward-looking statements made herein are based on current expectations of the Company that involve a number of risks and uncertainties and should not be considered as guarantees of future performance. These statements are made under the Safe Harbor Provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by the use of words such as "expect," "anticipate," "believe," "intend," "plans," "predict," or "will". Although the Company believes that expectations are based on reasonable assumptions, management can give no assurance that the expectations will materialize. Many factors could cause actual results to differ materially from the Company's forward-looking statements. These factors include the following, among other matters: the Company's ability to obtain and retain order volumes from customers who represent significant proportions of net sales; the Company's ability to maintain the pricing model, offset higher costs with price increases and/or decrease the cost of sales; the variability of customer delivery requirements and the ability of the Company to anticipate and respond thereto; the level of and ability to generate sales of higher margin products and services; the Company's level of debt and provisions in its credit agreement which could make the Company sensitive to changes in the economy or its industry and limit the Company's ability to react to changes in the economy or its industry; the Company's ability to comply with the financial and other covenants contained in its credit agreement, including as a result of events beyond its control, which could result in an event of default; the Company's reliance on revenue from exports and the impact on the Company's financial results due to economic uncertainty and disruption including, but not limited to, the COVID-19 pandemic, the Russia/Ukraine conflict, volatility in commodity and energy prices and our ability to offset higher costs with price increases; changes in trade policy and tariffs, tax laws and regulations, or downturns in foreign and domestic markets; and continued availability of labor, supplies, and raw materials used in manufacturing at competitive prices, variations in the mix of products sold; the amount and timing of investment in capital equipment, sales and marketing, engineering and information technology resources. The Company is under no obligation and does not intend to update, revise or otherwise publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of any unanticipated events.

Results of Operations

The following table sets forth, for the periods indicated, the percentages of the net sales represented by certain items reflected in the Company's consolidated statements of operations.

	Year Ended	
	December 31,	
	2021	2020
Net sales	100.0 %	100.0 %
Cost of sales	90.9	83.0
Gross profit	9.1	17.0
Selling and marketing	2.2	2.5
General and administrative	14.1	13.5
Other income	(15.7)	(6.0)
Income before income tax provision (benefit)	8.5	7.0
Income tax provision (benefit)	—	—
Net income	8.5 %	7.0 %

Net Sales

Net sales	2021	2020	\$ Change	% Change
Year ended December 31,	\$ 20,410,331	\$ 20,838,354	\$ (428,023)	(2.1)%

The decrease in consolidated net sales for 2021 versus 2020 was due to decreases in machining and injection molding sales, partially offset by increases in sensors sales and in tooling and NRE (non-recurring engineering) revenue. Machining orthopedic product sales were down due to the pandemic effect of delayed surgeries. Molding suffered a downturn largely due to the effect of transitioning from non-targeted product segments to medical device products currently in development.

Net sales of sensors increased 16.5% for the year ended December 31, 2021, as compared to the prior year, primarily due to increased sales to two customers.

Net sales of injection molding declined 22.7% for the year ended December 31, 2021, as compared to the prior year, largely due to decreased sales to one automotive parts customer.

Net sales of machining components decreased by 17.5% for the year ended December 31, 2021, as compared to the prior year, primarily due to decreased sales of orthopedics products.

Net sales of tooling/NRE increased 481% for the year ended December 31, 2021, as compared to the prior year, due to the delayed completion of tooling projects in 2020 and the Company's increased opportunities for NRE work in 2021.

Gross Profit

Gross profit	2021	2020	\$ Change	% Change
Year ended December 31,	\$ 1,850,840	\$ 3,546,232	\$ (1,695,392)	(47.8)%
As a percentage of sales	9.1%	17.0%		

The decrease in consolidated gross profit for the year ended December 31, 2021 versus 2020 was primarily due to increased staffing in an effort to strengthen the Company's depth of engineering and technical

expertise in conjunction with 2021 product development activity and in anticipation of expected production growth in 2022. Additionally, gross margins declined for the custom molding and machining product line in conjunction with decreased sales for those products with fixed costs being carried by lesser volumes

Selling and Marketing

The Company's consolidated selling and marketing expenses decreased to \$457,212 (2.2% of net sales) in 2021 from \$528,794 (2.5% of net sales) in 2020, a 13.5% decrease of \$71,582. The year over year decrease was primarily due to decreased commissions.

General and Administrative

The Company's consolidated general and administrative expenses increased to \$2,879,595 (14.1% of net sales) in 2021 compared to \$2,803,213 (13.5% of net sales) in 2020, a 2.7% increase of \$76,383 year over year. The greatest contributor to the net increase was costs of recruitment.

Other Income (Expense)

Other income, net, was \$3,212,903 in 2021 compared to other income, net of \$933,664 in 2020, a change of \$2,279,239. On June 3, 2021, the Company completed the sale and leaseback of one of its buildings, with the Company realizing proceeds of approximately \$3.9 Million. The net gain on the transaction, after adjustments for purchased assets and an environmental remediation accrual, was \$3,341,357. In 2020, the Company recognized \$1,213,125 of proceeds associated with the Payroll Protection Program under the CARES Act as other income.

Interest expense was \$128,954 in 2021 compared to \$322,673 in 2020, a decrease of \$193,719. The decrease in interest expense can be attributed to the payoff of the bank debt and subordinated notes in July 2021. The average outstanding debt under the new Loan & Security Agreement for the remainder of 2021 was significantly lower than the average debt balances during 2020.

Income Tax Provision

The tax provisions for the years ended December 31, 2021 and 2020 are attributable to the U.S. federal and state income taxes. The Company's combined federal and state effective income tax rate was 0% in 2021 and 2020 due to the impact of deferred tax assets reserved for with a valuation allowance.

Earnings Per Share

Consolidated basic earnings per share for the year ended December 31, 2021 was \$0.57 per share compared to basic earnings per share of \$0.39 for the year ended December 31, 2020, an increase in earnings per share of \$0.18. Consolidated diluted earnings per share for the year ended December 31, 2021 was \$0.54 per share compared to diluted earnings per share of \$0.39 for the year ended December 31, 2020, an increase in earnings per share of \$0.16. The change in earnings per share for the year ended December 31, 2021, is due largely to a \$2,279,239 increase in other income mainly due to the net gain on the sale of the building, less a \$1,673,192 decrease in income from operations.

Commitments and Contingencies

A right-of-use asset and a corresponding lease liability for the net present value of the Company's long-term building lease were recorded upon the effective date of the lease on June 3, 2021, in accordance with ASC 842, Leases. The difference between total lease payments and the net present value is being amortized as lease expense over the noncancellable lease term. One operating lease has not been recognized under ASC 842 due to its immateriality. Lease expense under all operating leases was \$248,990 and \$19,635 for the years ended December 31, 2021 and 2020, respectively. Future minimum lease payments of \$389,984 are due for the year ending December 31, 2022. See Note 9 to the Consolidated Financial Statements for all future lease payment obligations.

Liquidity and Capital Resources

Working capital was \$3,145,670 at December 31, 2021 compared to \$1,003,519 at December 31, 2020, an increase of \$2,142,151. The increase is primarily due to the pay-off of the Term Notes and the Revolver with the Company's prior lender and the pay-off of the subordinated promissory notes, with the proceeds from the Sale-Leaseback transaction that was consummated in July 2021. Other significant factors which partially offset the \$4,003,385 decrease in short-term debt are a \$1,475,821 decrease in accounts receivable, a \$270,582 increase in inventories, a \$273,250 increase in accounts payable and a \$177,624 increase in contract liabilities which are progress billings for tooling projects in progress.

Cash on hand was \$163,746 and \$570 at December 31, 2021 and 2020, respectively.

Trade accounts receivable, net of allowance for doubtful accounts were \$2,467,530 and \$3,943,351 at December 31, 2021 and December 31, 2020, respectively, a decrease of \$1,475,821.

Inventories were \$3,002,124 at December 31, 2021 as compared to \$2,731,542 at December 31, 2020, an increase of \$270,582 due largely to an increase in work-in-process inventory related to tooling projects in progress.

Accounts payable decreased by \$273,250 for the year ended December 31, 2021 as compared to the prior year ended December 31, 2020. Accrued expenses and other current liabilities for the period ended December 31, 2021 as compared to the prior year end increased by \$73,680. For the period ended December 31, 2021 as compared to the prior period, contract liabilities increased \$177,624 representing progress billings on several tooling projects.

Capital equipment expenditures were \$987,900 for the fiscal year ended December 31, 2021 as compared to \$479,969 in the fiscal year ended December 31, 2020. The capital purchases in fiscal year 2021, primarily consisted of \$493,183 in spending on an ERP system (both hardware and software) which was implemented in 2021 and \$327,752 on a new 55 ton molding machine and add-ons.

On June 30, 2021, the Company entered into a three-year \$7,000,000 Loan and Security Agreement (the "Credit Agreement") with Berkshire Bank, a Massachusetts banking corporation, replacing the Company's previous lender and credit facility. The Agreement includes a revolving line of credit ("Revolver") of up to \$5.0 million and a capital expenditures line of credit of \$2.0 million ("Equipment Line of Credit"). Both lines are secured by substantially all of the assets of the Company.

On March 30, 2022, the Company entered into the First Amendment to the Loan and Security Agreement in which violations of the financial covenants for 2021 were waived and certain covenants for the first two quarters of 2022 were eliminated. The terms of the First Amendment also included a freeze on capital expenditures borrowing on the equipment line of credit, an amendment to the interest on the Revolver, a reduction of the total commitment on the Revolver from \$5.0 million to \$3.5 million, and an availability holdback of the borrowing base of \$500,000.

At December 31, 2021, the Company's total debt, net of discounts, was \$334,890 as compared to

\$4,485,476 at December 31, 2020, a decrease of \$4,150,586. The total outstanding debt at December 31, 2021 is comprised of the principal amount of \$379,000 on financed capital equipment under the Credit Agreement, net of \$44,110 of debit issuance costs. The decrease in total debt is primarily due to the use of the Sale-Leaseback proceeds to pay off the Company's indebtedness under the expired credit agreement as well as the sub-ordinated notes.

No dividends were declared or paid in 2021 or 2020.

Cash flows from operations, together with existing working capital, booked orders, expense management, and the Revolver will be sufficient to fund operations at current and projected levels and to repay debt obligations over the next twelve months. However, there can be no assurance that the Company will be able to do so.

Summary of Changes in Cash Position

At December 31, 2021, the Company had cash on hand of \$163,746, an increase of \$163,176 from December 31, 2020. The Company's credit agreements provide for daily sweeps of cash on hand against the outstanding balances on the Revolver. The net cash flows for the year ended December 31, 2021 are discussed in further detail below.

Operating Cash Flows

Net cash provided by operating activities in 2021 was \$1,274,112 a result of the net income, changes in working capital components and non-cash add-backs, primarily a gain on the sale of a building in connection with the Sale-Leaseback transaction as well as depreciation and amortization. Net cash provided by operating activities in 2020 was \$1,307,780. The decrease from year to year was \$33,668.

Investing Cash Flows

Net cash provided by investing activities in 2021 was \$2,960,544 consisting of \$3,948,444 in proceeds, primarily from the sale of a building, less \$987,900 in purchases of fixed assets. \$493,183 was spent on software, hardware and implementation costs of a new ERP system and \$327,752 on a 55-ton molding machine and add-ons. Net cash used by investing activities in 2020 was \$473,988 spent on capital equipment investments.

Financing Cash Flows

Net cash used in financing activities in 2021 was \$4,071,480 consisting of the payments and pay-off of \$3,166,667 on term loans, the \$836,718 reduction of the Revolver balance, and the payments and pay-off of \$500,000 of subordinated promissory notes. These were partially offset by \$379,000 in proceeds from financed equipment and \$113,522 in proceeds received from stock purchased by employees through the Key Employee Stock Purchase Plan. Net cash used by financing activities in 2020 was \$833,724.

Off-Balance Sheet Arrangements

The Company has no off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on its financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

Inflation

The Company believes that inflation in the United States or international markets has not had a significant effect on its results of operations for the fiscal years ended 2021 and 2020. However, there has been considerable volatility in both energy and commodity prices, including the cost of silver. These fluctuations, price increases for other raw materials, increasing costs of labor, as well as the Company's ability to increase product prices, may have an impact on our future results of operations.

Critical Accounting Policies

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, assumptions and estimates that affect the amounts reported. Note 2 to the consolidated financial statements describes the significant accounting policies used in the preparation of the consolidated financial statements. Some of these significant accounting policies are considered to be critical accounting policies, as defined below.

A critical accounting policy is defined as one that is both material to the presentation of the Company's financial statements and requires management to make difficult, subjective or complex judgments that could have a material effect on the Company's financial condition and results of operations. Specifically, critical accounting estimates have the following attributes: 1) the Company is required to make assumptions about matters that are highly uncertain at the time of the estimate; and 2) different estimates the Company could reasonably have used, or changes in the estimate that are reasonably likely to occur, would have a material effect on the Company's financial condition or results of operations. Estimates and assumptions about future events and their effects cannot be determined with certainty. The Company bases its estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. These estimates may change as new events occur, as additional information is obtained and as the Company's operating environment changes. These changes have historically been minor and have been included in the consolidated financial statements as soon as they became known. In addition, management is periodically faced with uncertainties, the outcomes of which are not within its control and will not be known for prolonged periods of time. Based on a critical assessment of its accounting policies and the underlying judgments and uncertainties affecting the application of those policies, management believes that the Company's consolidated financial statements are fairly stated in accordance with generally accepted accounting principles and present a meaningful presentation of the Company's financial condition and results of operations.

Management believes that the following are critical accounting policies. See Note 2 to the consolidated financial statements for application and impact of these accounting policies to the Company.

- Revenue recognition,
- Inventory valuation, and
- Valuation of Deferred tax assets.

Liquidity and Management's Plan

At December 31, 2021, the Company identified certain conditions and events which, in the aggregate, required management to perform an assessment of the Company's ability to continue as a going concern. These conditions included the Company's negative financial history and the Company's ability to generate sufficient cash to support the Company's operations and to meet debt service requirements under the Company's credit agreement. As of December 31, 2021, the Company has \$163,746 of cash and approximately \$2,100,000 of borrowing capacity on its revolving line of credit ("Revolver"). As a result of these factors, management has performed an analysis to evaluate the entity's ability to continue as a going concern for one year after the financial statements issuance date.

Management's analysis includes forecasting future revenues, expenditures and cash flows, taking into consideration past performance and the requirements under the credit agreement. Revenue and cash flow forecasts are dependent on the Company's ability to fill booked orders, to close on new and expanded business, and to improve overall financial performance.

On March 30, 2022, the Company entered into the First Amendment to the Loan and Security Agreement in which violations of the financial covenants for 2021 were waived and certain covenants for the first two quarters of 2022 were eliminated. The terms of the First Amendment also included a freeze on capital expenditures borrowing on the equipment line of credit, an amendment to the interest on the Revolver, a reduction of the total commitment on the Revolver from \$5.0 million to \$3.5 million, and an availability holdback of the borrowing base of \$500,000.

Based on management’s analysis, the Company believes that cash flows from operations, together with existing working capital, booked orders, expense management, and the Revolver will be sufficient to fund operations at current and projected levels and to repay debt obligations over the next twelve months. However, there can be no assurance that the Company will be able to do so.

PART E – ISSUANCE HISTORY

Item 16 List of Securities Offerings and Shares Issued for Services in the Past Two Years

	Date of Issuance	Type of Security	Person/Entity	Number of Shares of Underlying Common Stock	Per Share Exercise Price	Trading Status	Legend Yes/No
Stock Options Issued ⁽¹⁾	1/2/2020	Stock Options	Officers & Employee	80,000	\$1.68	Restricted	Yes
	2/27/2020	Stock Options	Advisor	2,500	\$2.45	Restricted	Yes
	3/12/2020	Stock Options	Employee	5,000	\$3.23	Restricted	Yes
	2/27/2021	Stock Options	Advisor	2,500	\$3.15	Restricted	Yes
	9/7/2021	Stock Options	Officer	15,000	\$2.85	Restricted	Yes
	12/29/2021	Stock Options	Employee	15,000	\$3.15	Restricted	Yes
Stock Options Exercised ⁽¹⁾	7/15/2021	Shares	Former Officer	15,400	\$1.68	Restricted	Yes
	7/15/2021	Shares	Former Officer	15,000	\$2.51	Restricted	Yes
Stock Options Forfeited ⁽¹⁾	10/15/2021	Stock Options	Former Officer	4,600	\$1.68	Unrestricted	No
	10/15/2021	Stock Options	Former Officer	15,000	\$2.51	Unrestricted	No
Stock Options Expired ⁽¹⁾	5/19/2021	Stock Options	Board Director	10,000	9.86	Unrestricted	No
	6/3/2021	Stock Options	Board Director	10,000	5.73	Unrestricted	No
Restricted Stock Units Issued	1/1/2021	Stock Options	Officers/Key Employee	14,128	\$3.15	Restricted	Yes
Shares ⁽¹⁾ in Lieu of Cash Compensation	10/6/2020	Shares	Board of Directors	47,250	\$2.50	Restricted	Yes
	1/4/2021	Shares	Board of Directors	44,500	\$3.34	Restricted	Yes
Exercised Purchase Rights ⁽²⁾	12/1/2020	Shares	Officer & Employees	25,148	\$2.43	Restricted	Yes
	12/1/2020	Shares	Officer	16,835	\$2.97	Restricted	Yes

1. The stock options and shares referenced were issued pursuant to the Company’s 2010 Equity Incentive Plan and 2019 Equity Incentive Plan, as more fully described in Item 10, “Equity Incentive Plans”, in the Company’s Financial Statements included in this Annual Report
2. The shares referenced were issued pursuant to the Company’s Key Employee Stock Purchase Plan as more fully described in Item 10, “Key Employee Stock Purchase Plan”, in the Company’s Financial Statements included in this Annual Report.

PART F – EXHIBITS

Item 17 Material Contracts

The following is a list of all contracts which the Company is a party to, and which currently can reasonably be regarded as material to a security holder of the Company as of the date of this Annual Report:

- Certificate of Incorporation, as amended by that certain Certificate of Amendment dated July 10, 2015 and that certain Certificate of Amendment dated March 8, 2017
- Amended and Restated By-laws dated June 24, 2011
- 2010 Equity Incentive Plan
- 2019 Equity Incentive Plan
- Executive Incentive Compensation Plan
- Key Employee Stock Purchase Plan
- Loan and Security Agreement and ancillary agreements between the Company and Berkshire Bank dated June 30, 2021, as amended by the First Amendment to the Loan and Security Agreement dated March 30, (the “Berkshire Credit Agreement”).
- Form of Warrant
- Employment Agreement between the Company and William J. Laursen (the “Laursen Employment Agreement”).
- Employment Agreement between the Company and Glen r. Bunnell (the “Bunnell Employment Agreement”).
- Lease for the property known as 41 Sawyer Passway, Fitchburg, MA between 41 Sawyer Passway, LLC and Micron Products, Inc. dated June 3, 2021 with an original term of ten years and four options to extend the term for an additional five years each.

Copies of these agreements will be available for inspection at the office of the Company located at 25 Sawyer Passway, Fitchburg, Massachusetts 01420, during ordinary business hours. With the exception of the Key Employee Stock Purchase Plan, the Berkshire Credit Agreement, and the Bunnell Employment Agreement, these agreements were included in the Company’s previous filings with the SEC.

Item 18 Articles of Incorporation and Bylaws

The information required by this Item 19 has been included in the Company’s previous filings with the SEC and is herein incorporated by reference. There have been no amendments to the Certificate of Incorporation or Bylaws since those previously filed with the SEC and referenced above in Item 17 of this Annual Report.

Item 19 Purchasers of Equity Securities by the Issuer and Affiliated Purchasers

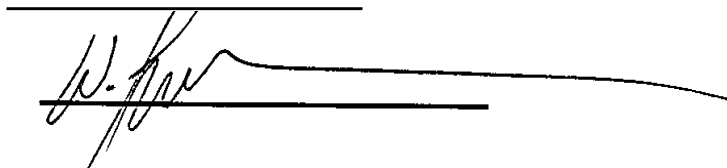
There were no purchases of equity securities by the Company or Affiliated Purchasers as defined in Item 19 of the OTC Disclosure Guidelines during fiscal 2021.

Item 20 Issuer's Certifications

I, William J. Laursen, certify that:

1. I have reviewed this Annual Report of Micron Solutions, Inc (the "Company") for the year ended December 31, 2021;
2. Based on my knowledge, this disclosure statement 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 disclosure statement; and
3. Based on my knowledge, the financial statements, and other financial information included or incorporated by reference in this disclosure statement, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this disclosure statement.

Date: March 30, 2022

A handwritten signature in black ink, appearing to read 'W. Laursen', is written over a horizontal line. The signature is stylized and extends to the right, crossing the line.

William J. Laursen
President & Chief Executive Officer

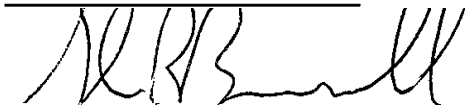
I, Glen R. Bunnell, certify that:

1. I have reviewed this Annual Report of Micron Solutions, Inc. (the "Company") for the year ended December 31, 2021;

2. Based on my knowledge, this disclosure statement 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 disclosure statement; and

3. Based on my knowledge, the financial statements, and other financial information included or incorporated by reference in this disclosure statement, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this disclosure statement.

Date: March 30, 2022

A handwritten signature in black ink, appearing to read "Glen R. Bunnell", is written over a horizontal line.

Glen R. Bunnell

Treasurer & Chief Financial Officer

**Micron Solutions, Inc.
and Subsidiary**

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Micron Solutions, Inc. and Subsidiary

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Micron Solutions, Inc. and Subsidiary (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of income, changes in shareholders' equity, and cash flows for the years then ended 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 December 31, 2021 and 2020, and the results of its operations and its cash flows for the years then ended, 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 audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

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

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Management's Going Concern Assessment

As discussed in Note 1 to the financial statements, Company management identified certain conditions and events which, considered in the aggregate, raise substantial doubt about the Company's ability to continue as a going concern within one year after the date the financial statements are issued. As a result, Company management has performed an assessment and applied judgments in concluding that its plans are probable of being effectively implemented and mitigate the relevant conditions that raise substantial doubt.

Management judgments with the highest degree of subjectivity in determining it is probable that the Company's plans will be effectively implemented include its ability to meet revenue and margins forecasts, manage expenditures and meet compliance requirements of the credit agreement. We have identified management's assessment as a critical audit matter as a result of the high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant judgments related to its assessment.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the financial statements. These procedures included evaluating the probability that the Company will be successful in achieving its revenue and margins forecasts as well as managing expenditures and adhering to compliance requirements in the credit agreement. Management's plans were evaluated in the context of other audit evidence obtained, including historical financial results, during the audit to determine whether such information supported or contradicted the assumptions used by management in its assessment. Lastly, we evaluated the adequacy of the Company's disclosures regarding this matter in the notes to the financial statements.

/s/ Wolf & Company, P.C.

Boston, Massachusetts

March 30, 2022

We have served as the Company's auditor since 2013.

**Micron Solutions, Inc. and Subsidiary
Consolidated Balance Sheets**

	December 31, 2021	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 13,746	\$ 570
Restricted cash	150,000	—
Trade accounts receivable, net of allowance for doubtful accounts of \$43,169 and \$39,169 at December 31, 2021 and 2020, respectively	2,467,530	3,943,351
Inventories	3,002,124	2,731,542
Prepaid expenses and other current assets	372,503	364,238
Total current assets	6,005,903	7,039,701
Property, plant and equipment, net	2,471,708	3,028,688
Intangible assets, net	35,315	43,945
Right of use Operating lease asset, net of amortization	3,317,049	—
Other assets	89,160	4,660
Total assets	\$ 11,919,135	\$ 10,116,994
Liabilities and Shareholders' Equity		
Current liabilities:		
Revolving line of credit	\$ —	\$ 836,718
Term notes payable, current portion, net	—	3,166,667
Accounts payable	769,048	495,798
Accrued expenses and other current liabilities	810,246	736,568
Contract liabilities	978,055	800,431
Operating lease liability, current portion	302,884	—
Total current liabilities	2,860,233	6,036,182
Long-term liabilities:		
Equipment line of credit, net	334,890	—
Operating lease liability, non-current portion	3,014,165	—
Subordinated promissory notes, net	—	482,091
Total long-term liabilities	3,349,055	482,091
Total liabilities	6,209,288	6,518,273
Commitments and Contingencies		
Shareholders' equity:		
Preferred stock, \$0.001 par value; 2,000,000 shares authorized, none issued	—	—
Common stock, \$0.01 par value; 10,000,000 shares authorized; 3,926,491 shares issued, 3,085,742 and 2,994,007 shares outstanding at December 31, 2021 and 2020, respectively	39,265	39,265
Additional paid-in-capital	11,879,895	11,746,031
Treasury stock at cost, 840,749 and 932,484 shares at December 31, 2021 and 2020, respectively	(2,294,520)	(2,544,846)
Accumulated deficit	(3,914,793)	(5,641,729)
Total shareholders' equity	5,709,847	3,598,721
Total liabilities and shareholders' equity	\$ 11,919,135	\$ 10,116,994

See accompanying notes to consolidated financial statements.

**Micron Solutions, Inc. and Subsidiary
Consolidated Statements of Income**

	Years Ended	
	December 31,	
	2021	2020
Net sales	\$ 20,410,331	\$ 20,838,354
Cost of sales	18,559,491	17,292,122
Gross profit	1,850,840	3,546,232
Selling and marketing	457,212	528,794
General and administrative	2,879,596	2,803,213
Total operating expenses	3,336,808	3,332,007
Income (loss) from operations	(1,485,967)	214,225
Other income (expense):		
Interest expense	(128,954)	(322,673)
Gain on sale-leaseback	3,341,357	
Paycheck Protection Program grant income	—	1,213,125
Other income, net	500	43,212
Total other income (expense), net	3,212,903	933,664
Net income before income tax provision (benefit)	1,726,936	1,147,889
Income tax provision (benefit)	—	—
Net income	\$ 1,726,936	\$ 1,147,889
Weighted average common shares outstanding - basic	3,048,361	2,931,757
Earnings per share - basic	\$0.57	\$0.39
Weighted average common shares outstanding, diluted	3,227,489	2,948,065
Earnings per share - diluted	\$0.54	\$0.39

See accompanying notes to consolidated financial statements.

**Micron Solutions, Inc. and Subsidiary
Consolidated Statements of Shareholders' Equity**

	Common stock		Additional	Treasury stock		Accumulated	Total
	Shares	Amount	paid-in capital	Shares	Amount	deficit	
December 31, 2019	3,926,491	\$ 39,265	\$ 11,735,457	1,019,882	\$ (2,783,055)	\$ (6,789,618)	\$ 2,202,049
Share-based compensation			69,658				69,658
Issuance of common stock from treasury			(51,460)	(62,250)	169,585		118,125
Purchase of common stock under Employee Stock Purchase Plan			(7,624)	(25,148)	68,624		61,000
Net income						1,147,889	1,147,889
December 31, 2020	3,926,491	\$ 39,265	\$ 11,746,031	932,484	\$ (2,544,846)	\$ (5,641,729)	\$ 3,598,721
Share-based compensation			122,038				122,038
Issuance of common stock from treasury			27,199	(44,500)	121,431		148,630
Exercise of stock options			(19,433)	(30,400)	82,955		63,522
Purchase of common stock under Employee Stock Purchase Plan			4,061	(16,835)	45,939		50,000
Net income						1,726,936	1,726,936
December 31, 2021	3,926,491	\$ 39,265	\$ 11,879,895	840,749	\$ (2,294,520)	\$ (3,914,793)	\$ 5,709,847

See accompanying notes to consolidated financial statements.

**Micron Solutions, Inc. and Subsidiary
Consolidated Statements of Cash Flows**

	Years Ended	
	December 31,	
	2021	2020
Cash flows from operating activities:		
Net income	\$ 1,726,936	\$ 1,147,889
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Gain on sale of property, plant and equipment	(3,341,357)	(45,019)
Depreciation and amortization	1,109,857	1,295,799
Non-cash interest expense	34,416	78,291
Share-based compensation expense	270,668	187,783
Other	(4,434)	—
Changes in operating assets and liabilities:		
Accounts receivable	1,475,821	(1,791,097)
Inventories	(270,582)	(262,894)
Prepaid expenses and other assets	(92,765)	(105,394)
Accounts payable	273,250	(345,270)
Accrued expenses and other current liabilities	(85,322)	352,732
Contract liabilities	177,624	794,959
Net cash provided by operating activities	1,274,112	1,307,779
Cash flows from investing activities:		
Purchases of property, plant and equipment	(987,900)	(479,968)
Proceeds from sale of building	3,948,444	5,980
Net cash provided by (used in) investing activities	2,960,544	(473,988)
Cash flows from financing activities:		
Payments on revolving line of credit, net	(836,718)	(437,581)
Payments on term notes payable	(3,166,667)	(457,143)
Proceeds from equipment line of credit	379,000	—
Payments on subordinated promissory notes	(500,000)	—
Proceeds from exercise of stock options	63,522	—
Debt issuance costs	(60,617)	—
Purchases of Stock under Key Employees Stock Purchase Plan	50,000	61,000
Net cash used in financing activities	(4,071,480)	(833,724)
Net change in cash and cash equivalents	163,176	67
Cash, cash equivalents and restricted cash, beginning of period	570	503
Cash, cash equivalents and restricted cash, end of period	\$ 163,746	\$ 570

	Years Ended	
	December 31,	
<i>Supplemental Cash Flow Information</i>	2021	2020
Cash paid for interest	\$ 82,432	\$ 250,590
Proceeds from Paycheck Protection Program grant		1,213,125
Non-cash activities:		
Issuance of treasury stock for directors' fees	\$ 148,630	\$ 118,125
Recognition of right of use asset offset by lease liability (current and non-current portions)	3,464,580	\$ —

See accompanying notes to consolidated financial statements

Micron Solutions, Inc. and Subsidiary
Notes to Consolidated Financial Statements
Years Ended December 31, 2021 and 2020

1. Description of Business

Micron Solutions[®], Inc., a Delaware corporation ("Micron Solutions"), through its wholly-owned Massachusetts operating subsidiary, Micron Products[®], Inc. ("Micron" and together with Micron Solutions, the "Company"), is a diversified contract manufacturing organization ("CMO") that produces highly-engineered, innovative components requiring precision machining and thermoplastic injection molding. The Company manufactures components, devices and equipment for medical, military, automotive and consumer products applications. The Company's products include silver/silver chloride coated and conductive resin sensors used as consumable component parts in the manufacture of integrated disposable electrophysiological sensors. The Company's machining operations produce quick-turn, high volume and patient-specific orthopedic implant components and instruments as well as products for the defense industry. The Company has custom thermoplastic injection molding capabilities as well, and provides a full array of design, engineering, production services and management. The Company's diversified manufacturing capabilities enables it to participate in full product life-cycle activities from early-stage development and engineering and prototyping to full scale manufacturing as well as packaging and product fulfillment services.

Liquidity and Management's Plan

At December 31, 2021, the Company identified certain conditions and events which, in the aggregate, required management to perform an assessment of the Company's ability to continue as a going concern. These conditions included the Company's negative financial history and the Company's ability to generate sufficient cash to support the Company's operations and to meet debt service requirements under the Company's credit agreement. As of December 31, 2021, the Company has \$163,746 of cash and approximately \$2,100,000 of borrowing capacity on its revolving line of credit ("Revolver"). As a result of these factors, management has performed an analysis to evaluate the entity's ability to continue as a going concern for one year after the financial statements issuance date.

Management's analysis includes forecasting future revenues, expenditures and cash flows, taking into consideration past performance and the requirements under the credit agreement. Revenue and cash flow forecasts are dependent on the Company's ability to fill booked orders, to close on new and expanded business, and to improve overall financial performance.

On March 30, 2022, the Company entered into the First Amendment to the Loan and Security Agreement in which violations of the financial covenants for 2021 were waived and certain covenants for the first two quarters of 2022 were eliminated. The terms of the First Amendment also included a freeze on capital expenditures borrowing on the equipment line of credit, an amendment to the interest on the Revolver, a reduction of the total commitment on the Revolver from \$5.0 million to \$3.5 million, and an availability holdback of the borrowing base of \$500,000.

Based on management's analysis, the Company believes that cash flows from operations, together with existing working capital, booked orders, expense management, and the Revolver will be sufficient to fund operations at current and projected levels and to repay debt obligations over the next twelve months. However, there can be no assurance that the Company will be able to do so.

Micron Solutions, Inc. and Subsidiary
Notes to Consolidated Financial Statements
Years Ended December 31, 2021 and 2020

2. Accounting Policies

Principles of consolidation

The consolidated financial statements (the “financial statements”) include the accounts of Micron Solutions, Inc. and its operating subsidiary, Micron Products, Inc. All 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 (“USA GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from those estimates.

Revenue recognition

The Company recognizes revenue primarily from the sale of products and in accordance with Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 606, “*Revenue from Contracts with Customers*”, (“Topic 606”).

The Company has determined that customer purchase orders represent contracts with a customer. For each contract, the Company considers the promise to transfer products, each of which are distinct, to be the identified performance obligations.

Shipping and handling activities for which the Company is responsible are not a separate promised service but instead are activities to fulfill the entity’s promise to transfer goods. Shipping and handling fees will be recognized at the same time as the related performance obligations are satisfied.

The Company determines the transaction price as the amount of consideration it expects to receive in exchange for transferring promised goods or services to the customer. If a contract includes a variable amount, such as a rebate, then the Company estimates the transaction price using either the expected value or the most likely amount of consideration to be received, depending upon the specific facts and circumstances. The Company includes estimated variable consideration in the transaction price only to the extent it is probable that a significant reversal of revenue will not occur when the uncertainty is resolved. The Company updates its estimate of variable consideration at the end of each reporting period to reflect changes in facts and circumstances.

The Company recognizes revenue at the point in time when it transfers control of the promised goods or services to the customer, which typically occurs once the product has shipped or has been delivered to the customer. For certain customer warehousing agreements, the transfer of control is deemed to have occurred when the customer pulls inventory out of the warehouse for use in their production. Additionally, for certain customers, control is deemed transferred when items are delivered to bill and hold locations at the Company’s facility.

The Company evaluates the nature of any guarantees or warranties related to its contracts with

Micron Solutions, Inc. and Subsidiary
Notes to Consolidated Financial Statements
Years Ended December 31, 2021 and 2020

customers. The Company provides an assurance-type warranty that only covers the products' compliance with agreed-upon specifications and does not provide the customer with a service in addition to the assurance that the product complies with agreed-upon specifications.

Certain contracts contain prepayment terms that result in liabilities for customer deposits. Additionally, certain contracts provide for invoicing before all performance obligations have been fulfilled which results in deferred revenue. Customer deposits and advance invoicing are recorded as contract liabilities on the Company's consolidated balance sheet.

The Company expenses sales commission when incurred because the amortization period would be one year or less. Sales commissions are recorded within selling and marketing expenses.

The Company does not disclose the value of unsatisfied performance obligations for contracts with an original expected duration of one year or less.

Tooling sales and costs are recognized at the point in time upon which the tool is completed and control is deemed to have transferred to the customer.

Recognition of Paycheck Protection Program Loan as Other Income

On April 3, 2020, the Company applied for a Paycheck Protection Program (PPP) loan in the amount of \$1,213,125 and received funding on April 21, 2020. During 2020, the Company incurred eligible expenses exceeding the loan amount and met the PPP's eligibility criteria for forgiveness. As a result, the Company recognized \$1,213,125 of other income during 2020.

While there is no US GAAP that specifically addresses the accounting by business entities for government assistance, ASC 105, *Generally Accepted Accounting Principles*, permits companies to analogize to other areas of authoritative guidance in US GAAP before considering other non-authoritative guidance issued by other standard setters. The Company has therefore chosen to account for the PPP loan as a government grant, specifically a conditional contribution, by analogy to FASB ASC 958-605, *Revenue Recognition*.

On February 3, 2021, Micron received notice of paycheck protection program loan forgiveness issued by the Small Business Administration.

Risks and Uncertainties

Financial instruments which potentially expose the Company to concentrations of credit risk consist primarily of accounts receivable and cash and cash equivalents. It is the Company's policy to place its cash in high quality financial institutions. The Company does not believe significant credit risk exists above federally insured limits with respect to these institutions.

Accounts receivable are customer obligations due under normal trade terms. A large portion of the Company's products are sold to large diversified medical, military and consumer parts product manufacturers. The Company does not generally require collateral for its sales; however, the Company believes that its terms of sale provide adequate protection against credit risk.

During the year ended December 31, 2021, the Company had net sales to three customers each

Micron Solutions, Inc. and Subsidiary
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Years Ended December 31, 2021 and 2020

constituting between 10 to 14% of total net sales. Accounts receivable from these three customers at December 31, 2021 aggregated 33% of the total accounts receivable balance. During the year ended December 31, 2020, the Company had net sales to four customers each constituting between 10-13% of total net sales. Accounts receivable from these four customers at December 31, 2020 aggregated 40% of the total accounts receivable balance.

The Company competes globally, with 46% of its revenue derived from exports in 2021. While some risks exist in foreign markets, the Company's customers have historically been based in stable regions. Accounts receivable insurance is used where available and appropriate to reduce risk in these markets.

On March 11, 2020, the World Health Organization declared the outbreak of coronavirus (COVID-19), as a pandemic. The Company continued to operate throughout all phases of the pandemic, having been deemed an essential business in Massachusetts. The pandemic has effected order volumes for some of the Company's customers and caused delays in obtaining certain raw materials. While these disruptions were temporary, the Company cannot be certain as to what future effects there will be from COVID-19 and its variants.

The current conflict between Russia and Ukraine is adversely affecting commodity prices. The duration and the level of impact on pricing and on the availability of raw materials is unknown. The Company has neither customers nor suppliers based in either Russia or Ukraine.

Cash and cash equivalents

The Company considers all highly liquid investments with an original maturity of three months or less at the date of purchase to be cash equivalents. Cash and cash equivalents consist of cash on hand in high quality financial institutions. The Company's credit agreement provides for a daily sweep of cash balances against the balance of the Revolver.

Accounts receivable and allowance for doubtful accounts

Accounts receivable represent amounts invoiced by the Company. Management maintains an allowance for doubtful accounts based on information obtained regarding individual accounts and historical experience. Amounts deemed uncollectible are written off against the allowance for doubtful accounts.

Inventories

The Company values its inventory at the lower of cost or net realizable value. Cost is determined using a standard cost system, which is intended to approximate actual costs on a first in first out (FIFO) basis. The cost methodology for custom molding and machining was changed from average cost to standard cost during 2021. The change was made to support more efficient and timely price assessment and management while maintaining consistent cost tracking. Standard costs approximated inventory average costs at the time of the change therefore no retrospective adjustment was made and the effect on current year operations was not material. For sensors silver content, the Company uses average cost. The Company reviews its inventory for quantities in excess of production requirements, for obsolescence and for compliance with internal quality specifications. A review of inventory on hand is made at least annually and obsolete inventory may be disposed of and/or recycled. Any adjustments to inventory would be equal to the difference between the cost of inventory and the estimated net realizable value based upon assumptions about future demand, market conditions and

Micron Solutions, Inc. and Subsidiary
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Years Ended December 31, 2021 and 2020

expected cost to distribute those products to market.

Property, plant and equipment

Property, plant and equipment are recorded at cost and include expenditures which substantially extend their useful lives. Depreciation on property, plant and equipment is calculated using the straight-line method over the estimated useful lives of the assets. Expenditures for maintenance and repairs are charged to earnings as incurred. When equipment is retired or sold, the resulting gain or loss is reflected in earnings.

Long-lived and intangible assets

The Company assesses the impairment of long-lived assets and intangible assets with finite lives annually or whenever events or changes in circumstances indicate that the carrying value may not be fully recoverable. Based upon the review, the Company recorded impairment charges of \$2,143 in 2021 and \$0 in 2020.

Intangible assets consist of the following:

	Estimated Useful Life (in years)	December 31, 2021			December 31, 2020		
		Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
Patents and trademarks	10	\$ 39,022	\$ 22,581	\$ 16,441	\$ 39,022	\$ 18,690	\$ 20,332
Patents and trademarks pending	—	—	—	—	2,143	—	2,143
Trade names	15	29,398	10,524	18,874	29,398	7,928	21,470
Total intangible assets		\$ 68,420	\$ 33,105	\$ 35,315	\$ 70,563	\$ 26,618	\$ 43,945

Amortization expense related to intangible assets was \$6,487 and \$5,706 in 2021 and 2020, respectively. Estimated future annual amortization expense for currently amortized intangible assets is expected to range from approximately \$6,488 annually, declining to approximately \$1,000 annually, through the year 2033.

Income taxes

The Company recognizes deferred tax liabilities and assets for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred tax liabilities and assets are determined based on the difference between the financial statement and tax bases of assets and liabilities using tax rates in effect for the year in which the differences are expected to reverse.

The Company follows the provisions of FASB ASC 740, "Accounting for Income Taxes", which provides detailed guidance for the financial statement recognition, measurement and disclosure of uncertain tax positions recognized in the financial statements. Tax positions must meet a "more-likely-than-not" recognition threshold at the effective date to be recognized. No interest and penalties related to uncertain tax positions were incurred during 2021 and 2020. The Company's primary operations are located in the United States. Generally, tax years ended December 31, 2018 or later remain subject to examination by the IRS and state taxing authorities.

Micron Solutions, Inc. and Subsidiary
Notes to Consolidated Financial Statements
Years Ended December 31, 2021 and 2020

Share-based compensation

Share-based compensation cost is measured at the grant date, based on the fair value of the award, and is recognized as an expense over the employee's requisite service period (generally the vesting period of the share-based grant).

The Fair Value of each stock option award is estimated on the date of grant using the Black-Scholes option pricing model that applied the following assumptions. Expected volatilities are based on historical volatility of the common stock using historical periods consistent with the expected term of the options. The expected term of options granted under the Company's equity incentive plan, all of which qualify as "plain vanilla" is based on the average of the contractual term and the vesting period as permitted under SEC Staff Accounting Bulletin Nos. 107 and 110. The risk-free rate is based on the yield of a U.S. Treasury security with a term consistent with the option.

Earnings per share data

Basic earnings (loss) per share is computed by dividing net income (loss) available to common shareholders by the weighted average number of common shares outstanding. The computation of diluted earnings (loss) per share is similar to the computation of basic earnings (loss) per share except that the denominator is increased to include the average number of additional common shares that would have been outstanding if the dilutive potential common shares had been issued. In addition, the numerator is adjusted for any changes in net income (loss) that would result from the assumed conversions of those potential shares.

	December 31,		December 31,	
	2021		2020	
Net income	\$	1,726,936	\$	1,147,889
Net income available to common shareholders	\$	1,726,936	\$	1,147,889
Earnings per share:				
Weighted average common shares outstanding basic		3,048,361		2,931,757
Earnings per share - basic	\$	0.57	\$	0.39
Diluted EPS:				
Weighted average common shares outstanding basic		3,048,361		2,931,757
Assumed conversion of net common shares issuable under stock option plans		65,000		16,308
Assumed conversion of restricted units		14,128		
Assumed conversion of net common shares issuable under warrants		100,000		
Weighted average common and common equivalent shares outstanding, diluted		3,227,489		2,948,065
Earnings per share - diluted	\$	0.54	\$	0.39

Leases

During 2021, the Company recorded a lease liability and a corresponding right-of use asset equal to the

Micron Solutions, Inc. and Subsidiary
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Years Ended December 31, 2021 and 2020

net present value of the Company's long-term building lease, effective June 3, 2021. The difference between total lease payments and the net present value is being amortized as lease expense over the term of the lease. One other operating lease has not been recognized on the Company's balance sheet under ASC 842 due to its immateriality.

Recently issued accounting pronouncements

In the normal course of business, management evaluates all new accounting pronouncements issued by the FASB to determine the potential impact they may have on the Company's Consolidated Financial Statements. Based upon this review, management does not expect any of the recently issued accounting pronouncements, which have not already been adopted, to have a material impact on the Company's consolidated financial statements.

Reclassification of prior period balances

Amounts in prior year financial statements are reclassified when necessary to conform to the current year presentation.

3. Inventories

Inventories consist of the following:

		December, 31		December, 31
		2021		2020
Raw materials	\$	860,948	\$	824,999
Work-in-process		1,647,950		944,034
Finished goods		493,226		962,509
Total	\$	3,002,124	\$	2,731,542

4. Property, Plant and Equipment, Net

Property, plant and equipment, net consist of the following:

	Asset Lives			December 31,		December 31,	
	(in years)			2021		2020	
Machinery and equipment	3	to	15	\$	18,436,842	\$	18,391,555
Building and improvements	5	to	25		1,583,827		4,021,258
Vehicles	3	to	5		100,096		100,096
Furniture, fixtures, computers and software	3	to	5		2,024,740		1,502,831
Construction in progress					468,051		266,786
Total property, plant and equipment					22,613,557		24,282,526
Less: accumulated depreciation					(20,141,849)		(21,253,838)
Property, plant and equipment, net				\$	2,471,708	\$	3,028,688

For the year ended December 31, 2021, the Company recorded \$1,101,227 of depreciation expense

Micron Solutions, Inc. and Subsidiary
Notes to Consolidated Financial Statements
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compared to \$1,290,093 for the year ended December 31, 2020. There are no commitments related to the completion of construction in process as of December 31, 2021.

5. Sale-leaseback

On May 14, 2021, the Company executed a purchase and sale agreement (the “P&S”) for the sale and leaseback of the Company’s main manufacturing facility in Fitchburg, Massachusetts. The agreement was made with an entity that is controlled by certain members of the Company’s Board of Directors, who are also stockholders (the “Buyer”). On June 3, 2021, the Company completed the sale and leaseback transaction, with the Company realizing proceeds of approximately \$3.9 million. The triple net lease on the Company’s 83,093 square foot facility has a ten-year term with four five-year extension options and initial rent of \$31,506 per month.

The Company evaluated the sale and leaseback under the provisions of ASC 842 and concluded the terms of the transaction met the criteria to account for as a sale and subsequent lease. Upon completion of the sale of the land and building, the Company recognized a gain of \$3,341,357 as other income, which is net of an approximate \$150,000 environmental loss contingency reserve included as restricted cash and accrued expenses and other current liabilities on the consolidated balance sheet at December 31, 2021. Pursuant to an Escrow Agreement between the Company and Buyer, the Company is obligated to pay for all environmental remediation costs, as defined by the Massachusetts Contingency Plan (“MCP”) regulations, up to and in excess of the reserved amount.

Upon execution of the lease, a right-of-use asset and a corresponding lease liability was recorded for the net present value of the lease payments in the amount of \$3,464,580. The difference between total lease payments and the net present value is being amortized as lease expense over the term of the lease.

6. Debt

The following table sets forth the items which comprise debt for the Company:

	December 31, 2021	December 31, 2020
Revolving line of credit	\$ —	\$ 836,718
Equipment line of credit	379,000	—
Term notes payable		3,166,667
Less current portion, net	—	—
Bank Debt, non-current	379,000	4,003,385
Subordinated notes payable, non-current, net	—	500,000
Total debt	379,000	4,503,385
Less: Debt discounts	(44,110)	(17,909)
Total debt, net	\$ 334,890	\$ 4,485,476

Bank Debt

On June 3, 2021, the Company completed the sale and leaseback of 41 Sawyer Passway, its main manufacturing facility. A portion of the net proceeds was used to pay in full the remaining outstanding balance

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of the revolver and term notes with its former lender.

On June 30, 2021, the Company entered into a three-year \$7,000,000 Loan and Security Agreement (the "Agreement") with a Massachusetts banking corporation, replacing the Company's previous lender. The Agreement includes a revolving line of credit ("Revolver") of up to \$5.0 million and a capital expenditures line of credit of \$2.0 million ("Equipment Line of Credit"), both lines secured by substantially all of the assets of Company. Under the terms of the Agreement, the Company repaid its outstanding subordinated notes payable in the amount of \$500,000.

The agreement contains covenants related to various matters including certain financial covenants, prohibitions on further borrowings and security interests, merger or consolidation, acquisitions, guarantees, sales of assets other than in the normal course of business, leasing, and payment of dividends.

On March 30, 2022, the Company entered into the First Amendment to the Loan and Security Agreement in which violations of the financial covenants for 2021 were waived and certain covenants for the first two quarters of 2022 were eliminated. The terms of the First Amendment also included a freeze on capital expenditures borrowing on the equipment line of credit, an amendment to the interest on the Revolver, a reduction of the total commitment on the Revolver from \$5.0 million to \$3.5 million, and an availability holdback of the borrowing base of \$500,000.

Revolver

The Revolver allows for interest only payments during the term of the facility with the full principal outstanding balance to be paid upon maturity on June 30, 2024. Interest on all borrowings from the Revolver shall be equal to the Wall Street Journal prime rate ("Prime Rate") plus 0.25%. In lieu of having interest charged at the Prime Rate, the Company shall have the option, upon thirty days prior written notice to the bank, to have interest charged at a rate of interest equal to the LIBOR rate, as defined, ("LIBOR Rate") for the following month. The Libor Rate option has a floor rate of 3.25%. The interest rate will automatically convert back to the Prime Rate at the beginning of the next month unless the Company elects the LIBOR Rate option. The interest rate on the Revolver was 3.25% at December 31, 2021.

The credit agreement provides for a daily sweep of cash balances against the balance of the Revolver. Availability to borrow under the Revolver is based on conditions defined in the credit agreement and amounts to approximately \$2,122,000 as of December 31, 2021.

Equipment Line of Credit

Through December 31, 2021, the Company has been advanced \$379,000 under the Equipment Line of Credit. Interest is charged on unpaid principal at the Prime Rate plus 0.50% (3.75% at December 31, 2021). Annually, on June 30, 2022 and 2023, the outstanding balance of the Equipment Line of Credit will be converted to a five year term loan at an interest rate of either the then prevailing Federal Home Loan Bank ("FHLB") five year rate plus 3.0% or the Prime Rate.

Amortization of deferred financing costs are included in interest expense as non-cash interest and was \$ 29,007 and \$78,291 for the years ended 2021 and 2020, respectively.

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Other debt

Subordinated promissory notes

In July 2019, the Company completed a private offering of the sale of subordinated promissory notes (the "Notes") in the amount of \$500,000.

Related parties who participated in the private offering were as follows:

Jason Chambers, Director	\$	50,000
Rodd Friedman, Director	\$	100,000
Andrei Soran, Director	\$	50,000

Interest expense paid on the subordinated promissory notes was \$25,795 and \$50,000 for the years ended December 31, 2021 and 2020, respectively.

The Company repaid the balance in full in July 2021.

7. Income Taxes

The Company continues to maintain a valuation allowance against its deferred tax assets and, together with the utilization of tax benefits, did not record an income tax provision for the years ending December 31, 2021 and 2020.

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The components of deferred income taxes are as follows:

	Year Ended			
	December 31,			
	2021		2020	
Deferred tax assets:				
Net operating loss carryforwards	\$	2,900,700	\$	3,444,000
Right of use asset, operating lease		906,200		—
Federal and state tax credits		435,200		439,100
Accruals and reserves		99,600		81,700
Stock based compensation		141,200		112,300
Other		2,800		7,700
Total long-term deferred tax assets		4,485,700		4,084,800
Deferred tax valuation allowance		(3,313,700)		(3,807,600)
Deferred tax assets, net of allowance		1,172,000		277,200
Lease liability		(906,200)		—
Property, plant and equipment		(188,100)		(244,000)
Prepaid expenses		(77,700)		(33,200)
Total deferred tax liabilities		(1,172,000)		(277,200)
Net deferred tax liabilities	\$	-	\$	-

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income, and tax-planning strategies in making this assessment. As of December 31, 2021, the Company continues to maintain a valuation allowance against all of its domestic and foreign deferred tax assets.

For the year ended December 31, 2021, the Company has federal and state net operating loss carryforwards totaling \$10,361,000 and \$10,036,000, respectively, which begin to expire in 2031. The Company also had federal and state tax credit carryovers of \$302,603 and \$167,800, respectively. The federal and state credits begin to expire in 2027 and 2022, respectively.

The Company files a consolidated federal income tax return. The actual income tax provision differs from applying the Federal statutory income tax rate (21%) to the pre-income tax income (loss) from continuing operations as follows:

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	Year Ended			
	December 31,			
	2021		2020	
Tax (benefit) computed at statutory rate	\$	371,136	\$	241,057
Increases (reductions) due to:				
Change in valuation allowance		(493,900)		(70,100)
State income taxes, net of federal benefit		74,296		1,713
Permanent differences		12,782		(242,412)
Differences on prior returns (federal and state)		35,686		69,742
Income tax provision	\$	—	\$	—

The Company follows the provisions of FASB ASC 740, “Accounting for Uncertainty in Income Taxes - An Interpretation of FASB No. 109.” FASB ASC 740 provides detailed guidance for the financial statement recognition, measurement and disclosure of uncertain tax positions recognized in the financial statements in accordance with SFAS No. 109. Tax positions must meet a “more-likely-than-not” recognition threshold at the effective date to be recognized upon the adoption of FASB ASC 740 and in subsequent periods. No interest and penalties related to uncertain tax positions were accrued at December 31, 2021.

8. Employee Benefit Plans

The Company sponsors an Employee Savings and Investment Plan under Section 401(k) of the Internal Revenue Code covering all eligible employees of the Company. Employees can contribute up to 90% of their eligible compensation to the maximum allowable by the IRS. The Company’s matching contributions are at the discretion of the Company. The Company’s matching contributions in 2021 and 2020 were \$64,745 and \$50,050, respectively.

9. Commitments and Contingencies

Environmental remediation

See Note 5 for environmental remediation costs expected to be incurred.

Legal matters

In the ordinary course of its business, the Company is involved in various legal proceedings involving a variety of matters. The Company does not believe there are any pending legal proceedings that will have a material impact on the Company’s financial position or results of operations.

Operating lease agreements

In addition to the building lease recorded on the balance sheet as the right of use asset and corresponding liability, the Company holds a one-year lease for a parking area, which ends in May 2022.

Lease expense under all operating leases, for the years ended December 30, 2021 and 2020 was \$248,990 and \$19,635, respectively.

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Future minimum lease payments for the years ending December 31 are as follows:

2022	\$	389,984
2023	\$	390,134
2024	\$	397,936
2025	\$	405,895
2026	\$	414,013
2027 through 2031	\$	1,928,791

10. Shareholders' equity

Common stock

In 2021 and 2020, the Company issued 44,500 and 47,250 shares of the Company's common stock from treasury, pursuant to the 2019 Equity Incentive Plan, with a fair value of \$148,630 and \$118,125, respectively, for directors' fees in lieu of cash payments.

In 2021 and 2020, the Company issued 16,835 and 25,148 shares of the Company's common stock from treasury, pursuant to the Key Employee Stock Purchase Plan for proceeds of \$50,000 and \$61,000, respectively.

In 2021, stock options for 30,400 shares of common stock were exercised. No shares were issued as a result of the exercise of stock options in 2020.

No dividends were declared or paid in 2021 or 2020.

Warrants

In connection with the issuance of subordinated promissory notes during 2019 (see Note 6), for every \$50,000 in principal invested in the notes, each investor received a warrant to purchase 10,000 shares of common stock (collectively, the "Warrants"). The Warrants are exercisable at an exercise price equal to \$2.90 per share and expire in July 2022. The Warrants contain standard provisions relating to anti-dilution adjustments for stock splits and recapitalizations. The Warrants also provide the investors with standard piggy-back registration rights in the event the Company files a registration statement (other than a registration statement on Form S-4 or S-8) to register the shares of common stock subject to standard limitations in the discretion of any underwriter.

No warrants were exercised in 2021 or 2020.

Stock options and Share-based incentive plans

Equity Incentive Plans

On March 25, 2019, the Company's Board of Directors adopted the 2019 Equity Incentive Plan (the "2019 Plan"). The 2019 Plan authorizes the issuance of an aggregate of 500,000 shares. The 2019 Plan provides the Company flexibility to award a mix of stock options, equity incentive grants, performance awards and other types of stock-based compensation. The options granted have five-year contractual terms for grants issued to greater than 10% stockholders and ten-year contractual terms for less than 10% stockholders.

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The assumptions used to measure the fair value of option grants in 2021 and 2020 were as follows:

	Year Ended December 31,	
	2021	2020
Expected option term (in years)	5.50	5.75
Expected volatility factor	125.87% to 160.99%	52.65%
Risk-free rate	0.36% to 1.29%	0.77%
Expected annual dividend yield	-	-

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The following table sets forth stock option activity for the year ended December 31, 2021:

	Number of options	Exercise Price	Weighted average remaining contractual term (in years)	Aggregate Intrinsic Value
Outstanding at December 31, 2020	271,500	\$ 3.34	5.02	\$ 160,375
Granted	40,000	3.00		
Exercised	(30,400)	2.09		
Forfeited	(19,600)	2.32		
Expired	(20,000)	7.80		
Outstanding at December 31, 2021	241,500	\$ 3.16	6.35	\$ 82,150
Exercisable at December 31, 2021	185,938	\$ 3.14	6.23	\$ 79,683
Exercisable at December 31, 2020	114,327	\$ 4.58	5.87	\$ 6,875

The following table sets forth restricted stock unit activity for the year ended December 31, 2021:

	Number of options
Exercisable at December 31, 2020	—
Granted	14,128
Exercised	—
Forfeited	—
Outstanding at December 31, 2021	14,128

For the years ended December 31, 2021 and 2020, share-based compensation expense related to stock options and the non-cash issuance of common stock amounted to \$79,694 and \$60,241, respectively. For the years ended December 31, 2021 and 2020 share-based compensation expense related to restricted stock units amounted to \$42,344 and \$9,417, respectively. Share-based compensation is included in general and administrative expenses. As of December 31, 2021, there was \$102,988 of unrecognized compensation costs related to non-vested share-based compensation arrangements granted under the stock option plans. This cost is expected to be recognized over a weighted average period of 2.5 years.

On December 31, 2021 there were 223,672 shares available for future grants under the 2019 Plan after giving effect to shares which became available for reissuance due to expired or forfeited options.

Key Employee Stock Purchase Plan

On November 23, 2020, the Company's Board of Directors adopted the Micron Solutions, Inc. Key Employee Stock Purchase Plan, a non-qualified plan for its officers and certain senior-level managers. Under the Plan, selected participants are granted stock purchase rights to purchase Company common stock. Stock purchase rights are fully vested when granted. The rights must be exercised on a designated purchase date or they are cancelled. The purchase price per share is the fair market value of the stock on the purchase date. The Plan is capped at 150,000 shares of common stock over the life of the Plan, which terminates on December 1, 2025. On July 2, 2021, one officer exercised rights under the plan for 16,835 shares at a fair market price of \$2.97. On December 1, 2020, three key employees, including one officer, exercised rights granted under the

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plan for 25,148 shares at a fair market price of \$2.43 per share.

11. Subsequent Events

Amendment to the Loan and Security Agreement

As further described in Note 6, on March 30, 2022, the Company entered into the First Amendment to the Loan and Security Agreement.

Long Term Incentive Plan (“LTIP”)

On January 19, 2022, options for 225,000 shares of the Company’s common stock were granted to two officers and a key employee under the 2019 Equity Incentive Plan. These grants are part of a Long Term Incentive Plan (LTIP). A total of 159,000 shares were granted. Under the LTIP, a third of the shares granted vest annually if certain annual EBITDA goals are met. The annual goals are for the years ended December 31, 2023 through December 31, 2025.

Stock Buyback

The Company’s Board of Directors has approved a stock repurchase program under which the Company may purchase up to \$1,000,000 of its Common Stock, but not to exceed 300,000 shares of Common Stock, or approximately 10% of the Company’s outstanding shares. Stock repurchases under the Company’s stock repurchase program may be made in the open market or in privately negotiated transactions or otherwise, with the amount and timing of repurchases subject to market conditions, contractual restrictions, assessments of corporate needs, available cash or financing, and other factors. Open market repurchases will be structured to occur within the pricing and volume requirements of Rule 10b-18. This Company’s stock repurchase program does not obligate the Company to acquire any particular amount of Common Stock and the program may be extended, modified, suspended or discontinued at any time at the Company’s discretion.