One Stop Systems Annual Report 2023

Form 10-K (NASDAQ:OSS)

Published: March 23rd, 2023

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

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2022

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _________ to _______

Commission File Number 001-38371

One Stop Systems, Inc.

(Exact name of Registrant as specified in its Charter)

Delaware	**33-0885351**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

2235 Enterprise Street #110
Escondido, California 92029
(Address of principal executive offices, including Zip Code)

(760) 745-9883

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.0001 per share	**OSS**	**The Nasdaq Stock Market LLC**

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).Yes ☒ No ☐

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
Emerging growth company	☒		

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

As of June 30, 2022, the last day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was $64,769,861, based on the closing price of the registrant's common stock on The Nasdaq Capital Market of $3.94 per share on such date. This calculation does not reflect a determination that persons are affiliates for any other purpose.

As of March 20, 2023, the registrant had 20,359,119 shares of common stock (par value $0.0001) outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None

Auditor Firm Id:	200	Auditor Name:	Haskell & White LLP	Auditor Location:	Irvine, California, U.S.A.

One Stop Systems, Inc.
FORM 10-K
For the Fiscal Year Ended December 31, 2022
Table of Contents

`

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K ("Annual Report") contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact contained in this Annual Report, including statements regarding our future operating results, financial position and cash flows, our business strategy and plans and our objectives for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. This Annual Report also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk. In some cases, you can identify forward-looking statements by terms such as "may," "will," "would," "could," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions. The forward-looking statements in this Annual Report are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, operating results, business strategy, short-term and long-term business operations and objectives. These forward-looking statements speak only as of the date of this Annual Report and are subject to a number of risks, uncertainties and assumptions, including those described in Part I, Item 1A, "Risk Factors." The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in a very competitive and rapidly changing environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

One Stop Systems, the One Stop Systems logo, and other trademarks or service marks of One Stop Systems appearing in this Annual Report are the property of One Stop Systems, Inc. This Annual Report also includes trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, trademarks and tradenames referred to in this Annual Report appear without the ® and ™ symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or that the applicable owner will not assert its rights, to these trademarks and tradenames.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly, and current reports, proxy statements and other information required by the Securities and Exchange Act of 1934, as amended (the "Exchange Act"), with the Securities and Exchange Commission (the "SEC"). Our SEC filings are available to the public on the SEC's internet site at http://www.sec.gov.

On our internet website, http://www.onestopsystems.com, we post the following recent filings as soon as reasonably practicable after they are electronically filed with or furnished to the SEC: our annual reports on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K, and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. The information in or accessible through the SEC and our website are not incorporated into, and are not considered part of, this Annual Report. Further, our references to the URLs for these websites are intended to be inactive textual references only.

PART I

ITEM 1. BUSINESS.

Company History

One Stop Systems, Inc. (“we,” “our,” “OSS,” or the “Company”) was originally incorporated as a California corporation in 1999, after initially being formed as a California limited liability company in 1998. On December 14, 2017, the Company was reincorporated as a Delaware corporation in connection with its initial public offering. The Company designs, manufactures, and markets specialized high-performance compute and storage hardware, software, and systems, which are designed to target edge artificial intelligence (“AI”) Transportable deployments. The Company markets its products to manufacturers of automated equipment used for autonomous vehicle, medical, industrial, and military applications, with special focus on platforms that move, such as trucks, planes, and mobile datacenters. This rapidly expanding segment of the edge compute and storage market is what we refer to as AI Transportables. If an application needs AI and/or autonomous capabilities, and it moves, OSS delivers the highest performance solutions that are designed to survive and enable these challenging applications.

During the year ended December 31, 2015, the Company formed a wholly owned subsidiary in Germany, One Stop Systems, GmbH (“OSS GmbH”). Then, in July 2016, the Company acquired Mission Technologies Group, Inc. (“Magma”) and its operations.

On August 31, 2018, the Company acquired Concept Development Inc. (“CDI”) located in Irvine, California. CDI specialized in the design and manufacture of custom high-performance computing systems for airborne in-flight entertainment, flight safety equipment, and networking systems. CDI’s business was fully integrated into the core operations of the Company as of June 1, 2020.

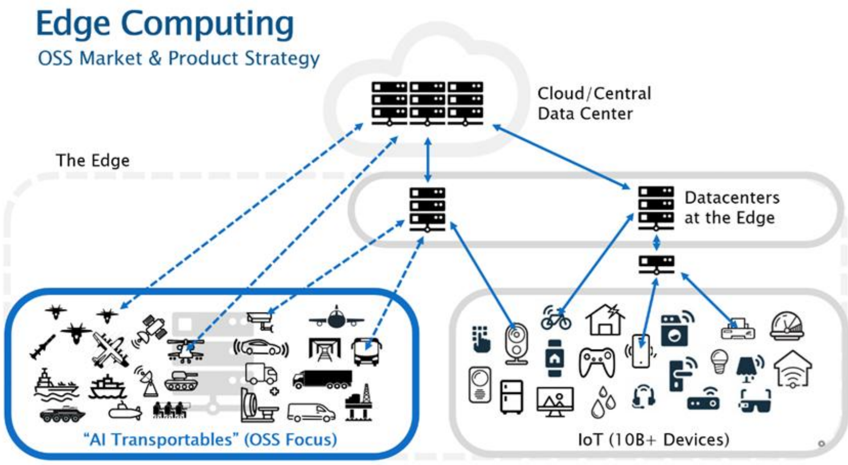
On October 31, 2018, OSS GmbH acquired 100% of the outstanding stock of Bressner Technology GmbH, a limited liability company registered under the laws of Germany and located near Munich, Germany (“OSS Europe”). OSS Europe designs and manufactures standard and customized servers, panel PCs, and PCIe accelerator systems. Although, currently, OSS Europe primarily serves as a value-added reseller for the Company in Europe, we are also focused on growing the AI Transportable portion of our business through OSS Europe and leveraging its existing relationships. OSS Europe also provides manufacturing, test, sales, and marketing services for customers throughout Europe, the Middle East and Africa (“EMEA”).

Our principal executive offices are located at 2235 Enterprise Street, Suite 110, Escondido, California 92029, and our telephone number is (760) 745-9883. Our website address is www.onestopsystems.com. Information contained in, or accessible through, our website is for reference purposes only.

Business Overview

One Stop Systems, Inc. (“OSS” or the “Company”) designs, manufactures, and markets specialized high-performance compute and storage hardware, software, and systems, which are designed to target edge AI Transportable deployments. Edge computing is a form of computing that is done on site, near a particular data source or the user (rather than in the cloud), minimizing the need for data to be processed in a remote data center. This growing trend increases computing performance and security, as the data does not have to travel to distant data center location. These specialized modules and systems consist of computers and storage products that incorporate the latest state-of-the art components with our embedded proprietary software. Such modules and systems allow our customers to offer high-end computing capabilities (often integrated within their equipment) to their target markets and applications.

The fast-growing edge computing space consists of three major segments. The first segment is comprised of many smaller data centers located near the users (or on the edge). These typically include compute and storage racks in environmentally controlled buildings, similar to large cloud data centers. Suppliers in this space tend to be the same large server and storage manufacturers whose products are used at cloud data centers. The second segment includes billions of Internet-of-Things ("IOT") devices that may reside in everything from home appliances to the factory production floor. These IOT devices and applications tend not to be challenged on performance and easily communicate up to the cloud or the data centers on the edge. OSS does not focus on either of the foregoing segments. The third segment is called AI Transportables. These are primarily on land, in the air or at sea vehicles that need performance without compromise for AI and Autonomous capabilities. This is where OSS' vision and strategy is aligned, and where we believe that we offer the greatest unique value to our customers.



Examples of applications that utilize AI Transportables range from industrial autonomous trucks, mining equipment and smart agricultural equipment to military land, sea, and airborne vehicles. Less mobile applications that utilize AI Transportables include items like medical equipment and mobile command centers. There is currently a growing demand for AI/autonomous capabilities within the commercial/industrial market, as well as for military use.

The AI and/or autonomous capabilities require these demanding applications to connect to a wide array of data sources and sensors, and to have the ability to quickly access and store large ever-growing data sets. They must be able to maintain ultra-fast processing power to act on data in real time at the edge location, which is independent of whether a high-speed network, like 5G, connects the edge application back to the distant central data centers. Standard servers and storage systems available in the market do not address, and typically will not survive, the AI Transportable requirements. Although the network, if it exists, may transfer data, or be used for updates, the latency is not acceptable for many of these applications where time is of the essence. This increases the need for data center type performance using the latest generation of products from companies like NVIDIA, AMD, and Intel. In most of these applications, available space is limited and the number of inputs from sensors and other data sources are significant, thus, requiring high speed input/output ("I/O") expansion like the latest in PCI Express, which OSS is known for in the market. In the case of vehicles, fuel efficiency, and particularly, in the case of aircraft, AI Transportables come into play due to the need for lower weight materials. Additionally, the mobility of these systems creates the need for the equipment to survive drops, g-forces, vibration, dust, wide temperature swings, and moisture.

While other edge computing suppliers may serve the needs of the environmentally controlled edge data centers with the latest technology, the deployment of the same performance level in the AI Transportable space requires unique capabilities and knowhow, which is where we believe that we excel. Many companies that enter this space tend to offer solutions based on older and lower performance technology, whereas we advance our proprietary state-of-the-art technologies and utilize the latest generation of products to ensure superior performance. We leverage our proven track-record of delivering first-to-market advanced technologies and technical strength, working with the latest high-speed networks like PCI Express 5.0 and NVIDIA's NVLink. This is in addition to our expertise with rugged servers, compute acceleration and high-performance flash array storage systems. When combined with our execution and knowledge for deploying these systems in challenging environments, we bring the latest commercially available technology and products to this market. Unlike the edge or cloud data centers in a building, these applications involve various unique requirements, playing to our strength and creating opportunities for additional barriers of entry.

Although in the past we have also designed and built custom servers with custom connectors and video media outputs for use in the media and entertainment industry, we are transitioning away from this lower margin business sector in order to concentrate on the AI Transportables sector.

Business Strategy

In March 2021, after reviewing our current business, market trends, the competitive landscape, reflecting on our strengths, as well as listening to feedback from current and potential customers, we determined that it would be in the best interest of the Company and our shareholders to shift our primary focus to the development and sale of AI Transportables. At that time, 20% of our business was already in the AI Transportables space. Our AI Transportables business accounts for some of our highest margins, repeat business, highest closure rate, and most importantly, we believe that it represents our highest value proposition when bringing together all our skills and experience.

Although we are seeing progress, it will take time to pursue, secure, and turn these target opportunities into increased revenue and profits, we believe our focus provides us with a unique opportunity to drive shareholder value. We are not abandoning current profitable business in the process, but are primarily focusing on this market segment for future growth. We believe the implementation of the new strategy and vision can drive this portion of our business from approximately 30% of our business today, to over 50% in the coming years by providing an opportunity for a higher growth rate, margins, and profits. This starts with identifying and closing opportunities in this space. Approximately 75% of our 2022 major account wins and 60% of our current pipeline of major account prospects, which are not yet closed, fall within the AI Transportables space.

We see opportunities in both the commercial/industrial and military/government segments. Currently, our military business accounts for approximately 25% of our overall sales, but we anticipate this will grow to 50% over the next few years. Although the overall military budget will likely vary depending on the administration and global tensions, both of which can impact how many new aircraft carriers or tanks are built, we believe the priority will remain on implementing AI throughout the military theater, and that military funding in this segment is more likely to grow than decrease as the United States continues to be competitive with China.

A key element of our product strategy is technological product leadership. We believe a first-to-market strategy is key to our ability to continue to win significant original equipment manufacturer ("OEM") opportunities. As a result, we continue to develop new state-of-the-art products, providing a unique value proposition for our customers in the targeted space. In November 2021, we introduced Rigel, the Super Edge Computing platform. We believe that this product is currently the highest performance, most compact supercomputer that can survive the most demanding next generation military programs available today. It brings to market the latest in Graphics Processing Units ("GPU"), Central Processing Unit ("CPU"), and memory products in a rugged compact form factor, which targets the military AI Transportable space. In 2022, Rigel was vetted by multiple large military prime contractors as well as the U.S. Department of Defense directly for key, high visibility programs that we are pursuing. Current engagements for our products in the military space cover various applications, including for multiple aircraft, drones, ships, helicopters, and land vehicles, as the Pentagon prioritizes incorporating advanced technologies into their equipment to add autonomous and AI capabilities throughout the military.

In 2022, we introduced the Centauri rugged storage expansion product, which has been deployed now by several autonomous truck companies, two of which are among our top ten accounts. Additionally, the short depth server (SDS) rugged space optimized server was introduced and has secured major design wins across commercial and military applications delivering high-performance GPU based AI capability in harsh environments.

Our ability to drive the leading edge of technology is enabled by our strong relationships with strategic component manufactures, including NVIDIA (for GPUs, ARM processors and networking), NetList, and Micron (for flash memory), Broadcom (for PCIe switch components), and Intel and AMD (for CPUs). In many cases, we have access to product roadmaps and other technical information relating to future technology. Access to this information allows us to begin our design process well before the future components we are designing even exist.

We sell our products worldwide to industry-leading customers. We service over 1,800 customers per year worldwide, with major repeat customers including Raytheon, the United States Navy, Thales, Liqid, and Alcon/Novartis. OSS Europe has aided in the expansion of our business within the European market. Although, currently OSS Europe primarily serves as a value-added reseller for the Company, we are also focused on growing the AI Transportable portion of our business through OSS Europe and leveraging its existing relationships.

We anticipate that the steps we have taken since implementing our new strategy in March 2021 and the fast growing markets that we are pursuing will provide accelerated revenue and margin growth for the Company over the coming years.

Industry Background and Market Opportunity

The notion of network-based computing dates to the 1960s, but many believe the first use of “cloud computing” in its modern context occurred in 2006 when Google’s then-CEO, Eric Schmidt, introduced the term during an industry conference. Years later, the explosive growth of IoT connected devices, along with new applications that require real-time computing power, started to create the drive for edge-computing systems. As the demand for AI on the edge and autonomous vehicles grew, so did the need for high-performance solutions to operate in harsh environments.

Edge computing is one of the fastest growing markets in the computing space, driven by the need to do more at the edge. The concept of edge computing is simply deploying compute systems closer to the actual user of the system, rather than communicating with a distant cloud computing facility. According to Gartner, Inc., a leader in technology research, only 10% of data was gathered and processed at the edge in 2018; however, it is expected that this number will grow to 75% by 2025. This dramatic change is driving an expected growth of over 38% per year between today and 2028, according to Grand View Research, resulting in an estimated market of $61 billion later this decade.

We currently estimate that the market for the AI Transportable portion of the edge computing industry will grow to approximately $1 billion to $5 billion in the coming years. OSS’ objective is to be the technology and market leader in the AI Transportable segment of this market.

In addition to the cornerstone high performance rugged server, three technologies are fundamental to the AI Transportable computing space: GPU compute accelerators, flash memory-based storage, and high-speed data acquisition I/O. These technologies enable systems to ingest, process and store data at significantly higher rates than traditional systems. By harnessing large quantities of these components, companies can receive necessary data analyses much more quickly and in a more secure manner, and as a result, turn raw data into actionable intelligence. Industry experts typically divide the high-performance computing market into the following categories:

- Servers – This includes all high-end servers and supercomputers.
- Storage – Flash-based storage devices primarily.
- Middleware – A broad category of software encompassing programming environments, schedulers, and other tools outside the operating system.
- Applications – Specific software applications for high-performance edge computing.
- Services – All services associated with this space.

The AI Transportable markets tend to implement AI, autonomous, and/or semi-autonomous capabilities. We believe markets for these products are large and growing. Applications deploying these technologies today, or that we expect to do so in the future, include:

- Commercial/Industrial- Trucks, buses, trains, aviation, agriculture, mining, medical, oil & gas, etc.
- Military/Government– Planes, watercraft, mobile command, helicopters, mobile radar, submersibles, vehicles, drones, etc.

We expect these applications to deploy increasingly faster computing systems to meet industry and competitive goals. Whereas the goal used to be for an edge compute platform to perform a single application, such as autonomous navigation, now this has been expanded to include five or more AI applications running simultaneously. This expansion requires much more compute power and data storage than traditional embedded computers can manage while operating in harsh, challenging, and space constrained environments.

Rugged Edge Servers

While simple AI applications, such as facial recognition to open a door to a secure area, may run on traditional low power embedded processor, the needs of the AI Transportable applications require datacenter-class server performance brought to a mobile vehicle. The sheer amount and speed of AI data acquisition for operating an autonomous truck or drone aircraft requires multiple high-speed digitizers, high-performance networking, the fastest flash storage devices, and server-class processors. We enable the power of the datacenter to be deployed at the edge without compromising performance by employing groundbreaking cooling technologies operating from various vehicle AC and DC power sources in small spaces.

GPU Compute Acceleration

The capabilities and speed of GPU accelerated computers are driving significant advances in AI and machine learning. Massive amounts of data are collected, stored, and analyzed by today's sophisticated algorithms. We are enabling the growth of such AI capability through adding scale with rugged systems that complement the highest performance rugged servers.

High Density Solid-State Storage

The proliferation of larger and larger data sets used in edge computing, including AI, is feeding the need for higher capacity and higher performance storage devices. Traditionally, companies have used hard disk drives for their primary storage. Hard disk drive-based systems are being replaced by flash memory-based systems, which offer higher capacity, performance, reliability, and ruggedness. Flash-based storage systems also consume significantly less power.

High Speed Data Acquisition

At the front-end of AI Transportable systems is high speed data acquisition technology. Depending on the application, the data can be generated from a wide array of sensors. In the case of an application utilized by autonomous vehicles, data is generated through arrays of video, LIDAR, and radar sensors. In battlefield applications, cameras, radar, sonar, FLIR (infrared), and RF sensors are deployed to generate data. In Medical applications, MRI or CT sensors are deployed to generate data, and in security applications, networks of security cameras produce high volumes of video data.

Key Components of Our Business

Product Development

Our systems are built using the latest CPU, GPU and flash storage technologies that draw upon years of expertise in designing and manufacturing semi-custom as well as standard systems for military and commercial OEMs. We have a history of being first-to-market with many solutions for emerging technologies. Our technological leadership includes linking the different OSS systems together. When PCIe was introduced in 2005, we were the first company to produce PCIe over cable adapters allowing system-to-system communication at the same speed as internal I/O expansion reducing latency significantly. Similarly, in 2018, we introduced the first PCIe Gen 4.0 cable adapters, and in 2019, we introduced the first PCIe Gen 4.0 system building blocks and platforms in which the PCIe Gen 4.0's ultra-high performance 16.0 GT/s (giga-transfers/second) and signal integrity challenges limits the number of players in this market and creates barriers to entry. Today, we are one of the largest providers of PCIe adapters and expansion components used worldwide. In 2022, we introduced the market's first PCIe Gen 5.0 cable adapters and the initial set of expansion products utilizing PCIe Gen 5.0, which once again doubles performance to 32.0 GT/s. All of these products maintain the highest performance of communication between our platforms.

When GPU technology and solid-state flash were first introduced, we began designing systems that maximized the effectiveness of these technologies. We now produce compute-systems with large numbers of GPUs and flash memory that communicate over PCIe and allow faster processing, data storage, and data retrieval. The more GPUs and flash devices available to a server, the faster that system can process and store data.

We use leading edge, state-of-the art components from major technology providers to design purpose-built systems that solve customer problems in an efficient, cost-effective manner. We apply the component technology provided by Intel, AMD, NVIDIA, Micron, Broadcom, and others to deliver solutions to provide true value to our customers.

Worldwide Sales

We sell our products on a worldwide basis and are supported through a network of direct salespeople, manufacturers' representatives, resellers, and distribution partners. Sales in North America and Europe are predominately driven by our direct sales force and manufacturers' sales representatives, whereas sales in Asia are driven through our distribution partners.

The acquisition of OSS Europe created a base for us to expand our European operations for sales, marketing, engineering, manufacturing, and support capabilities.

What Sets OSS Apart

Several factors differentiate OSS from other suppliers of high-performance edge computing solutions, including, without limitation the following:

- Our expertise in PCIe expansion and building custom systems, which allows us to design reliable systems using this challenging high-performance technology with a greater quantity of GPUs and flash storage devices than other suppliers.
- Our strength in PCIe and NVLink switch fabrics for the lowest latency possible.
- We leverage the latest technology available in the marketplace to create the highest performance, most compact systems where we ruggedize and harden our systems to operate within mobile or harsh environments, including full mil-spec systems.
- We design systems that can meet extreme environmental temperature ranges, while cooling extremely high power, heat generating GPUs and Field Programmable Gate Arrays ("FPGAs"), and providing options of customized tuned air and liquid cooling.
- We design the software required to operate high-capacity, low-latency storage systems used by defense systems and commercial applications.
- We design systems that can support the wide range of power input sources found in ground, sea, and airborne tactical and industrial vehicles.
- We design systems that both attach to existing servers through high-performance PCIe over cable, leveraging our customers' existing networks, as well as all-in-one systems with the server, GPU computing, data acquisition, networking, and flash storage devices all included in a single package.

Our business model consists of developing specialized computing solutions that our customers utilize as a key component of the equipment that they sell to end users. Our niche is to provide reliable purpose-built platforms with the latest high-performance computing technology that is focused on challenging edge deployments that are mobile.

Business Strategy

We have consistently followed a strategy of being first-to-market in leading edge deployment technologies by designing and developing products that are delivered before our competitors. This market leadership strategy is accomplished through what we term as the "Catch the Wave" approach to the market. We currently have products spanning the spectrum of high-performance computing including servers, flash storage, GPU acceleration, networking, and PCIe data acquisition I/O expansion. Within these product areas, the OSS "Catch the Wave" approach implies that we:

- Anticipate trends in these markets and do not hesitate to share our vision with customers to create thought leadership and deeper engagement;
- Swiftly deploy resources in engineering and sales to bring innovative products to market before our competitors;
- Leverage strategic relationships to get early access to future products and technologies;
- Hunt for early program wins with market leaders and leverage close relationships;

•Continuously monitor and influence the market for next generation technologies for which a new “Wave” may be forming; and

•Establish leadership in the fast-growing AI Transportable portion of edge computing.

Earnings Growth Strategy

We intend to implement different strategies to continue our revenue growth, while improving earnings. We believe that earnings growth can be accomplished by taking the following actions:

Revenue growth driven by existing OEM and new design wins:

•Focusing on the fast-growing, higher margin AI Transportable market;

•Demonstrating technology leadership with a clear, ever building value proposition;

•Utilizing a higher percentage of leading edge standard products for scalability;

•Pursuing market leading OEMs in the AI Transportable market;

•Continuing to layer in recurring high margin business;

•Constantly improving and expanding a highly skilled direct sales force complimented by well positioned third party manufacture representatives;

•Expanding worldwide sales efforts and marketing opportunities appropriately; and

•Completing sizable accretive acquisitions.

Higher margins:

•Challenging OSS-designed solutions that leverage our skills;

•Increasing proprietary content, software, stickiness, barriers of entry, and differentiating features;

•Prioritization of the highest return programs/markets;

•Maximizing military and other high value applications and sectors;

•Leveraging economies of scale and lowering material costs;

•Eliminating lower margin products and markets;

•Driving operational efficiencies up through automation, discipline, and process improvements; and

•Layering in additional high margin services.

Optimize expenses:

•Promoting a culture that innovates to minimize spending and drive higher efficiency per employee;

•Utilizing technology and talent on team to increase efficiency;

•Leveraging efficiencies of scale; and

•Welcoming organizational change as business and markets adjust.

Our Opportunity

The worldwide edge computing market is expected to grow at a compounded annual growth rate (“CAGR”) of 38% to $61 billion by 2028 (Grandview research, “Edge Computing Market Size,” May 2021). Within this market, we are positioned and focused on the AI/autonomous portion at the very edge, which we call AI Transportables, and we believe that this market could be as large as $5 billion within several years. The products we develop to address this market include high performance compute, storage servers, and PCIe acceleration systems that can perform in the most challenging environments. If an application needs AI and/or autonomous capabilities, and it moves, OSS strives to deliver the highest performance solutions that will survive and enable these challenging applications.

Our Technology

We design and manufacture high performance computing systems for use on the AI Transportable edge, which are designed to increase compute performance while surviving in harsh environments. Our high-density compute accelerators connect directly to a server's PCIe bus, delivering substantial compute performance. Our flash storage arrays support hundreds of terabytes of high-speed storage that can also be accessed by multiple servers.

Technology Drivers for OSS High-Performance Computing Business

We have developed expertise and core competencies in the three fundamental technology drivers within today's high-performance edge computing market – high-speed serial interconnect technology, compute acceleration utilizing GPUs, and low latency flash storage. In combination, these three fundamental technologies are changing the economics of computing, bringing high-performance computing within the grasp of a wide range of new industries and commercial applications on the edge. Simultaneously, the emergence of massive amounts of data being generated in each of these industries is pushing the requirement for innovative state-of-the-art technology. We are enabling this technology to be deployed at the edge by merging these fundamental technologies with our expertise in providing system level optimization for meeting requirements for ruggedization, space, weight, and power ("SWAP") constraints. Our strategy is to be the disruptive leader in the platforms for AI Transportable applications, and our strategy is based on our unique ability to design high-quality, high-performance AI workflow compute/storage engines that can be deployed in harsh dynamic environments, which require unique system level features for vibration, cooling, and power. Our target market, including various types of vehicles that moves on land, in the air or at sea, creates extremely demanding requirements for compute systems, which must be compact, survive the elements and disruptions like vibration, as well as leverage the higher performance capabilities in the market. This is what we believe we do well.

We strive to not only provide competitive advantage for companies, but also to address some of the most fundamental challenges in military and industrial applications. We believe that we are well situated to leverage these major industry forces. By exploiting our unique set of expertise in the underpinning technologies of high-performance computing, we strive to continue to deliver industry leading solutions, disruptive at times, and to take advantage of the opportunity to capture a growing market share in this rapidly expanding marketplace.

Switched Serial Interconnect

Switched serial interconnects are the data highways connecting many elements of today's high-performance computing platforms. At ever increasing speeds, these pathways move data between system's processing units, storage, networking, and peripheral elements. For high-performance computing, the primary processing, storage, and peripheral interconnect is PCIe. PCIe Gen 5.0 has an ability to run up to 16 lanes in parallel, which allows up to 128 gigabytes (full duplex) per second bandwidth between system elements. We introduced products based on PCIe Gen 5.0 during 2022, which doubles the system bandwidth over PCIe Gen 4.0.

Compute Acceleration with GPUs

GPUs have evolved from graphics display acceleration to becoming general-purpose processing workhorses for high-performance computing systems. Today, the majority of the fastest supercomputers in the world utilize GPUs as their primary compute engines. GPUs are ideal for high-performance computing workloads including AI training and inference because of their ability to complete massively parallel processing. While today traditional CPUs may have dozens of processing cores, GPUs have thousands of cores that are able to execute calculations simultaneously.

NVIDIA, a key supplier of GPUs to the market, lists more than 400 such applications across a broad set of market spaces along with focused teams on specific industries of high growth potential such as their NVIDIA Drive team for autonomous navigation. Main markets serviced by NVIDIA GPUs include, without limitation:

- Autonomous navigation;
- Computational finance;
- Climate, weather and ocean modeling;
- Computational chemistry and biology;
- Data science and analytics;

- Deep learning and machine learning;
- Federal defense and intelligence;
- Genomics;
- Manufacturing;
- Media and entertainment;
- Medical imaging;
- Oil and gas; and
- Safety and security.

While NVIDIA is focused on the deployment of their GPUs in data centers and for gaming purposes, we are focused on taking this capability to the AI Transportable edge, expanding the overall market significantly. Many of these applications also scale performance, based on the number of GPU components utilized. We have designed multi-GPU systems, including up to 16 GPUs in a single system. Current state-of-the art GPUs (NVIDIA H100) provide over 48 teraflops (FP64) of performance, with future products expected to dramatically increase overall processing capabilities in the years to come.

GPUs also pose significant system design challenges due to their high-power requirements. High-end GPUs can require 500 – 700 watts of power or more, which generates a tremendous amount of heat. Sophisticated power distribution and cooling designs are required, especially for large-scale systems with multiple GPUs per chassis. OSS has significant expertise in addressing these challenges.

PCI Express Flash Storage – NVMe protocol

The use of flash memory technology for system storage has gained traction over the past decade, which we believe to be a result of the continuous decline in the cost per gigabyte. Flash memory is now becoming the ubiquitous storage technology in high-performance systems.

Combined with the move away from traditional rotating hard drive technology, there has been the trend toward eliminating traditional storage protocols in favor of low latency flash memory protocols. Newer flash memory modules utilize a protocol known as NVMe, which connects the flash memory directly to the system's PCIe interconnect. This direct connection allows for very high bandwidth between the storage and the other system elements, which eliminates the need for protocol translation as data moves from storage subsystems to and from the compute complex.

Today, flash memory modules with capacities up to 32 terabytes and PCIe Gen 4.0 interfaces are now available. PCIe Gen 5.0 devices are expected to be available for purchase in 2023. Our flash storage arrays with hundreds of terabytes of capacity are available enabling the scaling of high-speed storage to meet the full range of high-performance edge application requirements.

OSS leverages the latest technology to build complete storage systems, including all the software to provide the highest density and performance in a compact form factor ideal for vehicles of all types. This, combined with our hot swappable canisters, has enabled many autonomous truck and military aircraft applications.

Our Core Technical Capabilities

We have developed unique expertise and core competency across the fundamental technologies of today's rapidly expanding specialized high-performance edge computing marketplace. These valuable assets are embedded in the leading-edge engineering capabilities of our engineers, the proprietary intellectual property residing in our vast library of designs, and our brand equity based on our reputation as a high-quality producer of state-of-the-art, custom and standard solutions across a broad array of markets.

High Speed System Interconnect Design

Our electrical engineers are experts in high-speed digital signaling design. They have continually designed at the leading edge of the state-of-the-art signaling speeds, even as semiconductor technology has driven up the clock rate of digital transmission. We have consistently been among a small handful of companies able to come to market first with the latest technology. In fact, we delivered the industry's first PCIe over cable solutions for PCIe Gen 1.0, Gen 2.0, Gen 3.0, Gen 4.0, and Gen 5.0, which we deployed in 2022. The expertise required includes circuit design, PCB (printed circuit board) layout and routing optimizations, all of which focus on achieving the highest levels of signal integrity. In our current systems, PCIe Gen 5.0 signals are propagated across multiple PCBs, connectors, and copper cabling, while maintaining the ability to recognize digital signal transitions at 32 billion times per second.

In high-performance computing systems, especially those systems that operate on the edge, the trajectory and need for ever-increasing signaling speeds is continuing; provided, however, the number of companies that have the capability to design robust, highly reliable systems at speeds that can tolerate the harsh conditions on the edge are continuing to decline. We believe our core competency in large-scale, high-speed design, and layout will allow us to remain on the forefront of this growing industry.

Complex System Design

In addition to low-level signal integrity design expertise, we have amassed expertise and intellectual property in high-performance system architecture design. This expertise allows us to develop extremely sophisticated systems with massive scaling, while also meeting customer demands for reliability, cost, and flexibility. To do so, we have developed deep knowledge for high-capacity input/output systems, operating system adjustments, and required configuration tuning. Due to this development, our engineers are often called upon to co-design with OEM designers to create the perfect solution to fit the needs of their customers.

For highly scalable systems, a deep understanding and experience with switching topologies and interconnect fabric design is required. We have worked with serial switching technology, starting with the first generation of PCIe, and have been an innovator in creating unique and flexible topologies to meet the specific needs of customers. Creating custom solutions for unique customer solutions is a core competency at OSS, and we rely on this deep knowledge of switch capabilities and limitations.

For maximum system performance, design for optimizing data transfer speeds is also an important consideration. We have developed expertise in system design to leverage peer-to-peer data flows between GPUs and pioneering techniques for optimized data flows between flash storage and GPU compute-engines. Our systems optimize switch and GPU configuration topologies to optimize GPU-to-GPU communication without requiring latency-inducing data transfer between host dual processors. Our platforms feature RDMA (remote direct memory access) across compute-nodes, which support data transfer without burdening the host CPU, as well as NVMe over Fabrics for efficient data transfer from remote storage to compute.

We have pioneered the ability to extend the PCIe bus beyond the confines of a single enclosure, opening the possibility of flexible system expansion options. We believe we are one of the leading designers and suppliers of PCIe host bus adapters that extend PCIe signals from the host motherboard across copper or optical cables to expansion enclosures, which provide application acceleration through scale. Our adapters provide both ends of the external cable connection. Our expertise in high-speed signal design in printed circuit boards, connectors, and cables is essential to successful expansion designs. We also hold expertise in incorporating clustering and rack scale expansion into our system designs, including 200/400 gigabit Ethernet, 200/400 gigabit InfiniBand, and emerging PCIe top-of-rack switch technology.

Expertise in power, cooling, and mechanical design are required to address the requirements of the high-performance computing customers, especially while meeting the constrained time requirements of AI Transportable deployments. We have developed leadership design capability in high-power design and distribution within large rack enclosures as well as edge optimized configurations. High-end GPUs today require 500 watts or above, and in our high-end systems, up to 16 of GPUs can reside in a single chassis. Thousands of kilowatts of redundant power are required. Power stability and huge thermal loads are some of the critical design issues that must be addressed. Additionally, at the edge for AI applications, a wide range of input power sources need to be supported from standard 110-220 VAC to 270 and 48 VDC for terrestrial vehicles to three phase 400-800Hz AC for airborne applications.

We have expertise in power distribution, redundant power, and complex chassis cooling design, including materials selection, airflow simulation, fan technology, and various liquid cooling options including direct to chip conductive cooling and single and dual phase immersion cooling. We have also developed extensive intellectual property to help ensure regulatory compliance of our complex high-performance computing system designs that span across emission, shock, vibration, thermal, humidity, and other environmental requirements that are required for highly reliable and highly available solutions. Our engineers are experts in design for regulatory testing for FCC (Federal Communications Commission), CE (European Conformity), UL (Underwriters Laboratories), and Mil-STD (Military Standard) standards. Additionally, we have expertise in rapid prototyping, design for manufacturability, and design for serviceability.

We have expertise in system management software that provides robust monitoring and management of the functions of complex computer systems. In 2022, we introduced the U-BMC, or "Unified Baseboard Management Controller," which is included in our Rigel edge supercomputer and PCIe Gen 5 4UP products. U-BMC will be standard on all future OSS system-level products. The U-BMC extends the traditional system management paradigm to support GPUs and PCIe switched fabric functions, even if the host is in a separate enclosure. With U-BMC, we provide "single pane of glass" management of complex systems and an open-source Redfish API for easy integration with industry-standard management tools. We expect to continue to expand and enhance our software to create additional value, barriers of entry and stickiness with our program wins.

Storage Management Software

Given our hardware design and integration expertise, we believe that our robust software capability allows us to offer more optimized and customized systems. Our Ion Accelerator™ software design team provides the expertise to deliver full server and storage solutions that produce the highest performance from today's leading-edge flash storage devices. The Ion Accelerator software allows flash-based modules to be put into a variety of storage and network configurations which can then be accessed by multiple edge servers. The Ion Accelerator software can do this cost-effectively, while preserving the low latency and security that is vital for many mission-critical applications, from secure network boot, database, and transaction processing to massive data collection programs.

Benefits of Technology and Core Capabilities to our Customers

Due to our core capabilities, we can provide our high-performance computing customers with platforms that are highly reliable and cost effective. Such performance allows our customers to solve larger problems faster, and save the cost and time of highly paid engineers, data scientists, and other human resources. Our technology enhances innovation by allowing more "what-if" analysis in a finite amount of time. Our price/performance leadership enhances our customers' competitiveness and lowers capital expense and total cost of ownership. We work with our OEM customers to develop custom "perfect fit solutions" for their unique requirements when the anticipated return justifies the investment.

Our Products

Compute Servers

Within the server sector, we have secured a niche position of building purpose-built specialty servers, which the major server suppliers do not supply, as they require custom tuning and special features that major OEMs cannot easily provide. Our compute servers are designed to provide the highest level of performance that can be deployed in harsh edge environments. Our extensible operating system ("EOS") line of servers is optimized for supporting a high number of expansion chassis. Servers in this product family have a number of slots that are compatible with the PCIe host bus interface cards that we have developed. These cards enable PCIe connection over cable between the host processor and downstream I/O devices. These servers have custom basic input/output systems ("BIOS") to ensure they work seamlessly with expansion chassis and support a high number of downstream I/O devices. Our SDS line supports rugged deployment in space constrained environments providing a maximum depth of 20 inches. We believe that our "Rigel Edge SuperComputer" ("Rigel") is the highest performing, most dense, AI-compute platform that is deployable in extreme environments, including on military aircraft.

GPU computing uses hardware components that are optimized to perform mathematical calculations in a rapid fashion. NVIDIA is the market leader in the design and manufacturing of these components. We work closely with NVIDIA to design and build systems which use multiple GPUs to accelerate applications.

Emerging markets and applications such as AI, image rendering and processing, autonomous vehicles, deep learning, molecular modeling, genomics, advanced visualization, machine learning, and image processing, all benefit from the ability to use GPUs to accelerate the application. We build specialized compute-servers and accelerators used in these emerging growth markets. We estimate these markets to be very large and growing. Because our strategy has been to be first-to-market with the fastest and densest compute appliances, we anticipate our addressable market to be in the hundreds of millions of dollars.

Storage Servers

We also build standard and custom flash storage arrays utilizing our unique know-how in PCIe device fan-out, packaging, cooling, and PCIe-over-cable. We deliver dense, high-performance systems that provide customers with high value and utility in the most demanding, data-intensive operations. These OSS Storage Servers complement our compute servers to provide an end-to-end edge solution for AI workflows.

Through a strategic agreement with Western Digital, we acquired an exclusive software license for Ion Accelerator™ Storage Area Networking ("SAN") source code and software development rights, as well as hired their core engineering team on July 1, 2017. Since acquiring this software asset, we have extended its capability to align with our AI Transportable strategy by adding Network Attached Storage ("NAS"), support for NVMe flash drives, NVMe over Fabric expansion capability, and several encryption methods required for government security applications. We have also implemented a proprietary Follow Me™ capability for removing a bulk pack of NVMe drives that can be easily transported to another system without rebuilding the data, operating much like a massive capacity USB stick. This provides our flash arrays with a high level of differentiation relating to storage management, latency, portability, and throughput. We provide standard flash array products and have the in-house hardware and software expertise to provide customized systems for demanding applications that are not suitable for standard offerings. For example, we provide products to a large military contractor for integration into military aircraft that requires us to design and manufacture a highly ruggedized mil-spec flash array. The resulting product provides high data density with low weight, a high degree of portability, and security for data protection. We believe our experience and capability in high speed, low-latency, digital signaling via PCIe gives us an edge in providing custom designs to OEMs, military programs, and other special purpose applications.

We believe that because our products are positively differentiated by speed, density, and management features for challenging edge applications, our offerings compete favorably in this market and provide a substantial growth opportunity.

PCIe Expansion and Adaptors

PCIe is the high-speed standard for communications within a computer. This standard defines the signals and connectors (i.e., slots) that are used for computer add-in cards (such as Ethernet or graphics). Traditionally, communication between computers in the network is completed via Ethernet. Although Ethernet is great for large networks, this introduces delays and latency challenges. To keep performance at the highest level, PCIe signaling can also be routed over a cable, allowing expansion input/output slots to be physically located in a separate chassis. This provides for high-performance and low latency, which are essential in this market.

Being able to separate the server from the I/O expansion, by using PCIe over a cable, facilitates disaggregation of server functionality. That is, with PCIe, server I/O functions no longer need to be contained in the physical server chassis, but instead, can be separated into a separate chassis and continue to operate at full speed. This offers many advantages over higher latency and power consuming traditional networking communications like Ethernet. From a practical perspective, servers can be connected directly to larger storage arrays or other peripheral devices, with the resulting group of chassis operating as if they were all in the same physical chassis.

We began developing our first PCIe-over-cable adaptor in 2006 and were one of the early providers of PCIe adaptors. We recognized this space as a prime opportunity to utilize our core strengths, such as:

- High-speed board design and layout;
- Signal integrity masters;
- Hardware tuning to improve signal integrity;
- Design optimization for low cost;
- Rapid design capability;
- Rugged to survive in harsh AI Transportable applications;
- Custom BIOS to support a high number of connected PCIe I/O devices well beyond what can be supported in off the shelf BIOS; and
- Manufacturing and supply chain management.

This technology has now become a standard within the computer industry, our customers have used our adaptors to connect their custom input/output chassis and achieve performance equivalence as if the input/output was integrated into the server box. This gives designers and integrators a degree of flexibility and utility in architecting computer systems that is unprecedented. We have expanded our PCIe adaptor market in breadth and depth, including making adaptors for many OEM customers.

With our expertise developed in designing adaptor cards, the logical extension of our capability led us to develop a method for expanding the PCIe bus into an external chassis containing one or many expansion slots and using this expansion to provide storage and AI application acceleration. This allows a customer to install multiple standard PCIe boards into a chassis and accelerate their system without having to add additional servers. These are typically GPUs, FPGAs or NVMe drives to create large-scale Compute and Storage appliances. For example, we have developed a product for deployment in a mobile command center, which aggregates large amounts of high frequency data from sensors and allows in the field AI algorithms to operate in real time. This is achieved through a cluster of our Compute and Storage products. A user can now connect a multiplicity of PCIe devices to a single server using a single memory domain, and achieve performance throughput and low latency, which was not possible prior to the introduction of PCIe.

We have been a leader in PCIe acceleration through generations 1.0, 2.0, 3.0, 4.0 and 5.0. We delivered our initial PCIe Gen 5.0 products in 2022, well ahead of any of our direct competitors. As PCIe evolves through generations 6.0 and beyond, we believe that we are uniquely positioned to continue our leadership role in this market. We have shipped a full line of PCIe Gen 4.0 products since 2020, and anticipate that we will have a full line of PCIe Gen 5.0 expansion solutions shipping in 2023. We currently offer what we believe to be the largest PCIe acceleration product line, with chassis and backplanes that offer expansion from one to 64 slots. Due to its greater data throughput and flexibility of design, we believe this is a growing market, and we intend to maintain our leadership role.

Additional Compute Products

Through OSS Europe, we provide small form factor IoT and high-performance industrial and panel PCs compute-platforms customizable to meet needs in commercial applications on the edge where space constraint is a fundamental consideration. We also provide ruggedized, mobile tablets and handhelds that meet the specialized requirement for devices deployed at the edge in a diverse set of environmental conditions for commercial and government applications.

Customers

We serve a global clientele consisting of multinational companies, governmental agencies, military contractors, and leading technology providers. Some of our key customers are set forth below, illustrating the class of customers we pursue with our sales, product marketing and marketing communications efforts.

Raytheon – We work closely with many of the U.S. Government agencies and prime contractors to bring the latest technologies to mobile edge applications. Raytheon provides an excellent example of how we adapted high-performance computing elements used in air-conditioned datacenters to the rigorous environment encountered in a U.S. Navy aircraft. We worked closely with Raytheon to build a customized NVMe storage array, with drives installed in removable canisters for high-speed sensor data acquisition, encryption, and recording. This massive amount of mission data can then be easily off-loaded upon landing the aircraft and sent to the traditional government data center, which is a significant development given that satellite network links are too slow to handle transmitting that amount of data. To further enhance the data collected, we embarked on a second project with Raytheon to build a GPU accelerated “datacenter in the sky” system to enable mission data collected in the flash array to be analyzed and run through AI algorithms in real time while the mission was in process. This allowed the aircraft and crew to make real time decisions using the same level of processing power available in a ground-based system. Finally, we enhanced that “datacenter in the sky” with a 3-system cluster to provide large scale resources during missions and to carry out multiple AI tasks in real time. These applications are great examples of AI transportable end products. We have continued to enhance and refresh the technology for this program while working on opportunities with other prime contractors, including other mobile applications such as video surveillance, video analytics and autonomous vehicles on land, in the sea and in the air. OSS is currently expanding its footprint within in the military market with multiple new engagements with other prime contractors and the U.S. Department of Defense (“DOD”) directly. Much of this activity is focused on our Rigel supercomputer, which addresses the needs of autonomy and AI required in the battlefield. Current applications include land vehicles, aircraft, drones, ships, and submersibles.

National Instruments – National Instruments is a market leader and multinational company that produces automated test equipment and virtual instrumentation software. We provide several PCI Express-based interface cards that are branded by National Instruments and used in capturing and controlling sensors that produce AI datasets. We act as an extension to

National Instruments' engineering group, allowing National Instruments to complete their product roadmap in a timely and cost-effective manner.

Alcon – Alcon is a market leader in the production of computer assisted medical equipment. OSS Europe provides several rugged, purpose-built, high-performance workstations used in performing these AI assisted surgeries. OSS Europe works directly with Alcon engineers to co-design and assist in securing medical certifications for the products that doctors and patient trust for pinpoint accuracy and speed.

disguise - disguise is the leading provider of hardware and software that allows their customers to produce live events, television broadcasts, theater effects, and special effects for concert tours. We have worked with disguise to design purpose-built, rugged servers that act as video controllers to create the virtual and visual effects used in these applications. These edge servers require high performance to create the most demanding effects, but also must be rugged enough to move from venue to venue every night. Events like the Super Bowl halftime show, sporting events, feature films, music videos, broadcast studio, metaverse experiences and numerous musical concerts rely upon disguise controllers, designed, and produced by us to deliver a lasting impression on audiences. We are seeing an acceleration in disguise's investment in cloud technology and a drive towards less intelligent compute capability at the edge to reduce the costs of their componentry. This is particularly true of their virtual products, which do not require the same level of ruggedization as this system is not typically operated in harsh environments and for which software is being developed to eventually provide a real-time cloud solution. As a result, we expect that disguise will transition to a lower cost, commodity type equipment solution. Although disguise has been a key customer in the past, in line with our current business strategy, we are transitioning away from lower margin product, contract-manufacturing type sales, and thus expect a decrease in the demand for our media and entertainment focused equipment and our expertise in this area in the first half of 2023, and that disguise will no longer be a key customer in the near future.

Sales and Marketing

Our sales and marketing efforts are focused on the identification, engagement, and closure of significant targeted opportunities within the AI Transportables space.

Sales

Our sales efforts consist of five main channels:

•General Sales – OSS and OSS Europe maintain websites, a web store and direct sales teams that sell directly to end-users, primarily in the U.S. and EMEA regions. This includes e-commerce sales via typical web store functionality, outbound calling and direct interaction with customers and potential customers to provide standard and unique solutions that fit their needs.

•OEM Focused Sales – Our direct outside sales team, which consists of OSS employees as well as third-party manufacture representatives, is organized to best identify, target, and develop the top potential commercial OEM and government program customers in the AI Transportable Space. These OEM and government programs form the largest and fastest growing parts of our business. The OSS direct sales teams interface directly with new potential customers at their facilities, live events, and virtual industry tradeshows, and present standard solutions and/or proposals for customized solutions (if solid return on investment) to address such customers' high-performance AI Transportable needs at the edge.

•Our Commercial Sales Team – Our commercial sales team focuses on OEM customers to whom we sell standard solutions or design and build customer specified systems based on OSS technology expertise that are branded with the OEM's name and label. This includes target markets like autonomous semi-trucks, farming, and mining equipment deploying the latest technology. These companies, many of which are market leaders, then resell the products through their own sales channels. We actively seek this type of relationship, which is leveraged as a sales multiplier, allowing us to grow sales at a faster rate without adding as many dedicated sales resources. This tends to be a recurring sales model that lasts several years.

•Our Government Sales Team – Our government sales team focuses on the large and growing portion of our business that provides systems to DOD programs, global government agencies, and national laboratories. Our government sales team has the knowledge and expertise to identify major program opportunities in the AI Transportable space and provide the extensive technical and business documentation to take these programs from concept to successful completion. This is a growing part of our business, one of our primary focuses, and provides a higher contribution of profit margin. Examples include compute and storage systems for aircraft, radar systems, and command centers. Our sales team engages with the large military prime contractors as well as the DOD directly.

•Channels – We have dedicated sales resources that manage our worldwide network of resellers and distributors, including those distributors that we utilize throughout Asia. We sell a large breadth of standard products through these channels, which allow us to achieve global customer touch without requiring a physical presence in all geographies. The master distributors in several countries have dedicated sales expertise to capture additional OEM business, with both Fortune 500 and second tier OEM firms extending our international footprint. Through OSS Europe, we have a greater direct presence in Europe, which allows greater access to those markets.

Marketing Communications

Our marketing communications department is responsible for positioning OSS as an expert, thought leader, and visionary in the AI Transportables market. We generate expert content to support our market leading products, while also building cost effective brand/product awareness in several ways. We use traditional and non-traditional marketing communications, as well as partnerships and word of mouth, to convey the uniqueness and compelling value of our products and services. The AI Transportable market applications we target include AI inference applications in autonomous vehicles, medical equipment, commercial aerospace, defense/government, agriculture, and mining. OSS Europe also targets embedded industrial and IoT customers in the EMEA region. Among the many channels utilized are:

•Trade Shows – OSS participates in several live and virtual tradeshows and events during the year to generate new relationships and foster existing relationships with customers and partners. These engagements allow us to showcase our standard and custom product expertise to our target customers. The target trade shows include AUSA (US Army), Sea-Air-Space (Navy/NASA), Advanced Driver Assistance Systems (autonomous vehicle), MOVE America (autonomous vehicle), AFCEA West (military), DSEI (international military), Supercomputing, Medica (medical), AUVSI (autonomous vehicle) and Embedded World. We evaluate the return on investment ("ROI") and costs of each show on an annual basis; accordingly, participation may change from year to year.

•Electronic Media – OSS uses various forms of electronic advertising media to market both the AI Transportable products and capabilities of the Company. Electronic media includes internal direct email campaigns, such as monthly newsletters and various press releases for new products, technology developments, partnerships and significant application design wins. In addition, we use media companies relevant to our target markets to disseminate information about the Company to a larger set of potential customers. The format of the electronic advertising varies, but with the common focus on content advertising demonstrating our market expertise with a secondary focus on brand awareness. The various electronic media formats that we utilize include, but are not limited to, search engine ads and keyword campaigns, digital ads, display ads, datasheet emails, customer use cases, e-newsletters, and text ads. Our web site is key at leveraging our leadership content, positioning, and search engine optimization ("SEO") capabilities. We will continue to invest on this front.

•Social Media – OSS regularly use Facebook, LinkedIn, and Twitter to instantly alert the Company's followers to new events, products, services, and customer stories.

•Publications – We periodically publish white papers, customer success stories, and other demand generation technology articles in printed and electronic periodicals and newsletters, including, but not limited to, Autonomous Vehicle International, Military Embedded Systems, Edge Industry Review, Aerospace and Defense and Auto News. We also invest in print ads in the EMEA region, with the highest ROI in select industry magazines for brand awareness.

As we grow, it is anticipated our marketing efforts will likewise continue to increase in size and focus on the AI Transportable market.

Competition

Our core business is to provide specialized high-performance edge AI computing platforms to OEMs who incorporate these products into their complete solutions, which they then sell to end users in the AI Transportable market. Although a fragmented market, due to the nature of our business, there are a number of categories of potential competitors of our products.

Customer in-house design resources

Many of our larger target OEM customers have in-house engineering design resources, which could be used as an alternative to engaging with us. Examples of current OSS customers who have significant in-house resources include National Instruments, Raytheon, and Lockheed Martin. This potential competition is mitigated by the technical specialization that we have, especially in high-end and large-scale PCI Express switch fabrics and PCI Express acceleration capabilities. OEMs can invest their in-house resources on value-add capabilities within their specific vertical market and outsource these horizontal technology capabilities to us. We have also developed a trusted partner relationship with many of these OEMs and have established a market reputation for technical expertise and a responsive and cost-effective engagement model. We win when our customers realize that together we can produce better products faster, more ruggedly, and more cost-effectively than they can by themselves. This has proven to be particularly evident when customers require state-of-the-art products that are constructed of commercially available parts but need to be deployed in harsh mobile environments. This has resulted in several program wins that demonstrate our flexibility and how we can work closely with large OEM and government customers. Interestingly, it appears that when these large companies cut back on their workforce or have limited funding, such events bolster our position, as we may become these companies' only option to get their desired product or service deployed within a reasonable period.

Major Tier 1 & 2 Mainstream Computer, GPU and Storage Vendors

These vendors offer mainstream high-performance computing platforms, including servers and storage systems that can address some applications at the edge in our target markets. Typically, they do not, however, offer the enhanced value platforms or customization capabilities that we specialize in to meet unique form factor, power, ruggedization or scale out requirements sought by OEM customers. Generally, these vendors focus on the large, air-conditioned data centers and competing with such vendors based on price/volume, as differentiation is challenging. Our strategy is specifically designed to avoid head-to-head competition in this part of the market with this class of vendors. In some scenarios, we can provide a complementary specialized component or building block, which interfaces with one of these vendors' mainstream products. Examples of companies in this space include NVIDIA, HP, Dell/EMC, IBM, SuperMicro, Pure Storage, and NetApp.

Vertical High Performance Compute Vendors – Military/Aerospace

In certain vertical markets, there are competitors who focus primarily on the high-performance compute ("HPC") military and aerospace markets. These vendors often provide complete solutions, including both hardware and software, and some specialization in terms of form factor and ruggedization. In these markets, we provide unique capability in terms of scaling of PCI Express components over cable (copper and fiber) that can address unique requirements of specific military or government programs. Many of these competitors use older technologies or low power processors and components in these more challenging environments. We are able to differentiate ourselves from such competitors due to the fact that we deploy the latest high-performance technology which enables us to provide superior products to potential customers in this space. We have also established good relationships with prime contractors or governmental agencies (Raytheon, Lockheed, Boeing, NASA, ONR, L3 and others), which can be important influencers or decision makers on technology selection. Competitors in this space include companies such as Mercury, Crystal, Curtiss Wright, Kontron, Trenton, Core Systems and Systel. In the past, we have been able to offer the latest technology to the rugged edge, which is normally only deployed in commercial applications, well before our competitors by leveraging our "performance, without compromise" strategy.

Manufacturing and Operations

Currently, OSS is certified under AS9100 and OSS Europe is certified under ISO 9001-2015 for "design, manufacture, and supply of industrial computers." This means we have demonstrated our ability to consistently provide products that meet both customer requirements and applicable government regulations or statutory requirements. AS9100 is the pinnacle of quality management systems recognized by government and aerospace companies world-wide. It also indicates that we have programs and processes in place to ensure a high level of customer satisfaction, as well as continuous improvement and risk mitigation programs that ensure we get better over time.

While OSS primarily utilizes lean principles to drive our manufacturing and assembly process, we recognize the importance of smooth builds and strategic inventory in this current climate of sustained supply chain shortages. One of the key aspects of utilizing lean principles is our application of just-in-time principles to ensure effective ordering and utilization of inventory. This also helps optimize cash flow throughout the manufacturing cycle. Within the manufacturing process, our operations encompass three categories of "builds":

•Standard Builds – These are builds of standard products that are sold with little or no customization or non-standard features. These are products that are ready to be installed or integrated by the customer upon receipt.

•Custom Builds – Custom builds involve a product built to a customer specification at our facilities. Upon receipt, the customer has a unique product that performs all the functions and has the physical dimensions that match their specifications.

•Engineering Project Builds – We support the product development process by building models and prototypes of products. Developed by our engineering group, the prototypes can be of standard or custom products. We build these products with the intent of shipping in volume later.

We are dedicated to quality and customer satisfaction. Our continuous improvement efforts require us to review products, services, and processes with the idea that minor changes can lead to greater outcomes for our customers. Although we serve the high-end of the rugged edge computing space, we are constantly looking for ways to become more efficient and drive down costs while driving up margins and quality.

Research and Development

Our ability to compete successfully in our industry is heavily dependent upon our ability to ensure a continuous and timely flow of competitive products, services, and technologies to the marketplace. We continue to develop new products and technologies and to enhance existing products that will further drive commercialization. We may also expand the range of our product offerings and intellectual property through licensing and/or acquisitions of third-party businesses and technologies.

Our intellectual property research and development is focused on the exploitation of key technologies as they evolve in the marketplace. Our product roadmap reflects new technologies for CPUs, GPUs, flash storage, and advanced PCIe switches. We design first-to-market, unique implementations targeted at the AI Transportable market utilizing market leading component technologies. Accordingly, our focus lies not in the capital-intensive development of silicon implementations of technologies (i.e., chips, processors, GPUs, or storage devices), but rather leverages leading-edge technologies and building first-to-market products that fully exploit those technologies to solve customer problems in challenging environments.

Our research and development strategy can be summarized as follows: ***We drive customer program wins by utilizing new key technologies to develop products that are leading edge and first-to-market and that are designed to solve challenging problems in harsh environments, while working closely with our customers to understand and address their needs.***

Intellectual Property

Our primary intellectual property value emanates from the more than 600 individual design projects that we have undertaken over the decades since our founding, experience, and knowhow, in addition to trade secrets and copyrights. These designs are archived and cataloged; we rarely begin a new design from scratch, but rather, use our archived and cataloged designs as a starting point to efficiently provide products to our customers. In general, we maintain intellectual property rights with respect to the components of the products we design and sell so that we may continue to use them for future sales and development efforts.

Over the years, our team has developed and maintained expertise in high-speed signal design and analysis, electronic and mechanical packaging, PCIe-over-cable, fiber optics transmission, high-speed/density flash arrays, and integration and deployment of GPUs in compute accelerators and servers. This extensive expertise positions us to expand and rationalize our product line to meet the growing and ever-changing high-performance computing market. We believe that the expertise of our staff is a considerable asset closely related to intellectual property, and attracting and retaining highly qualified employees is essential to our business.

Markets, Seasonality, and Major Customers

Our products and services serve a global clientele consisting of multinational companies, governmental agencies, military contractors, and leading technology providers. Based on recent market experience, it appears there are seasonality factors with deliveries decreasing in January and February each year. At OSS Europe, this is likely a result of Asia's holiday season, whereas at OSS in the US, this is more of a result of varied government and commercial customer appropriation cycles and the timing of budgets, which tend to be larger later in the year; however, we believe these market factors will continue to evolve and our insight into these trends will improve.

During 2020 2021, in particular, and to an extent in 2022, our business was impacted by the COVID-19 virus. This included reduced demand from some current and potential customers serving specific markets. The media and entertainment industries experienced delayed or canceled live concerts, other large in-person events, and sporting events during the height of the pandemic, which resulted in less demand for their products and services, which consequently resulted in a decrease in demand for our products designed for use in these industries. Fortunately, some of the decrease in demand for our live media and entertainment focused products was offset by growing demand for virtual events, especially in 2022. The commercial aerospace market was also impacted when air travel dropped significantly due to various COVID-19 related factors, such as stay-at-home orders, travel restrictions, the fear of being exposed to the virus in an aircraft and later by the shortage of crew members. With aircraft flying at lower capacities or sitting idle, the spending budgets were cut drastically, which decreased the demand for our commercial aerospace customers' products resulting in a decrease in demand for our products designed for use in the industry. As restrictions have lifted and fears have subsided, the impacts of COVID-19 on our business and that of our customers have also decreased significantly. Although, we cannot currently predict how the pandemic will continue to impact our business in the future, it is not anticipated to have significant impact to our customers and our business in 2023.

For the years ended December 31, 2022 and 2021, an aggregate of 37.4% and 41.5% of our total consolidated revenues, respectively, were attributable to three customers (disguise, Raytheon and Navy). As discussed elsewhere in this Annual Report, we expect that demand for our products by, and revenues attributable to, disguise will decrease in 2023 as a result of their investment in cloud technology and drive towards less intelligent compute capability at the edge. A loss or decline in business with either of the other two customers would have an adverse impact on our business, financial condition, and results of operations.

We typically provide our products under contract supply agreements or purchase orders. We provide our products, software, and services from our offices located in California, Utah, and Germany.

Materials and Suppliers

Although most components essential to our business are generally available from multiple sources, we believe that a loss or limited availability of certain component suppliers and manufacturing vendors could have a material adverse effect upon our business and financial condition.

Prior to 2021, we did not experience significant delays in the supply or availability of our key materials or components provided by our suppliers, nor did we experience a significant price increase for materials or components. However, in 2021, the worldwide supply shortage created many challenges, resulting in the need for our team to implement different strategies and analyze how we allocate resources. In 2022 and into 2023, we are continuing to experience unavailability of certain critical products and some limited supplies, protracted delivery dates for components, increasing product costs, and changes in minimum order quantities, which creates limitations on our ability to secure product. Shortages have ranged from semiconductors to packing materials for shipping. As a result, we are carrying increased inventory balances to ensure availability of necessary products and to secure pricing. Additionally, products that are in the "work-in-process" stage and the inventory of finished goods have increased due to timing and availability of certain componentry necessary to complete our products. We have worked with suppliers and customers to provide multiple options, including the alternative sourcing of similar products. We manage the business carefully to minimize any material impact to financial performance. For more information, see the section titled, "Risk Factors" found in Part I, Item1A, of this Annual Report.

Human Capital Resources, Employees, and Personnel

We believe that our future success will depend, in part, on our ability to continue to attract, hire, and retain qualified personnel. To achieve this objective, we strive to provide competitive compensation, benefits, stock participation, and a success driven work environment.

As of December 31, 2022, we had approximately 112 employees, of which 104 were full-time and 8 were part-time employees. Seventy-two of our employees were domestic and twenty-eight were international. Our employees include highly skilled engineers, technicians, assemblers, and support staff. Despite recent staffing challenges that have plagued the industry that we operate in, which have generally resulted in greater turnover throughout the industry, we are proud of the low voluntary turnover rate of our personnel to date, as we endeavor to continue to challenge our team and encourage input and creative thinking by all. Our management team strives to provide transparency to our employees through regular meetings designed to update employees on current metric driven results and future expectations. None of our employees are covered by a collective bargaining agreement or represented by a labor union. We consider our relationship with our employees to be strong.

Environmental Matters

No significant pollution or other types of hazardous emission result from our operations and it is not anticipated that our operations will be materially affected by federal, state, or local provisions concerning environmental controls. Our costs of complying with environmental, health and safety requirements have not been material.

Furthermore, we do not believe that compliance with existing or pending climate change legislation, regulation, or international treaties or accords are reasonably likely to have a material effect in the foreseeable future on our business or markets that we serve, nor on our results of operations, capital expenditures, earnings, competitive position, financial position, or any of our operations. However, we will continue to monitor emerging developments in this area.

Government Approval and Effect of Government Regulations

Because our core business is to provide specialized high-performance edge computing building blocks and platforms to OEMs who incorporate these products into their complete solutions, which they sell to end users in specific vertical markets, we do not believe that any government agency approval is required for the products and services that we provide to our customers.

We believe that our operations are substantially in compliance with all applicable laws and regulations and that we hold all necessary permits to operate our business in each jurisdiction in which our facilities are located. Our worldwide business activities are subject to various laws, rules, and regulations of the United States as well as of foreign governments.

Compliance with these laws, rules, and regulations has not historically had a material effect upon our capital expenditures, results of operations, or competitive position. However, governmental regulations, including but not limited to import and export law, privacy laws, customer, and trade regulations, are subject to change and interpretation and may affect our business in the future. For more information, see the section titled, “Risk Factors” found in Part I, Item1A, of this Annual Report.

Recent Developments

In the second quarter of 2022, we formed a new strategic advisory board to aid in the acceleration of our pursuit of the AI Transportables market, and the military sector in particular. The advisory board is comprised of retired high-ranking military officials and corporate executives with decades of experience in technology, high performance computing and M&A for the defense, oil & gas, AI and autonomous vehicle industry verticals. Members of the advisory board provide input on product and market strategy, as well as help us navigate government bureaucracy and identify/introduce us to key decision makers, all with the goal of accelerating our success through their contacts, knowledge and experience. Please see the section of this Annual Report entitled “Advisory Board Members,” below, for information regarding each of the members of our advisory board.

Furthermore, in the first quarter of 2023, we implemented certain internal organizational changes to align our US-based operations with, and to further support and accelerate, our strategy to focus on the AI Transportables industry, and our military business in particular. In furtherance of this strategy and our goals, we have taken various steps to strengthen our management team with individuals who have deep experience and high-level contacts in the defense sector. In connection with this transition, on February 9, 2023, we announced that David Raun, the Company’s chief executive officer, will be stepping down, effective upon the appointment of his successor. Mr. Raun will continue to serve as a member of the Company’s board of directors. Additionally, in connection with this transition, we also (i) appointed James Ison, our chief marketing and sales officer, as our chief product officer, (ii) initiated a search for a vice president of sales, (iii) implemented a reduction in force, consisting of 12 employees, in those areas of our business that we are transitioning our focus away from; and (iv) made certain other internal structural changes.

We have not yet identified a candidate to fill the roles of chief executive officer or a vice president of sales; however, we have retained an internationally recognized search firm to aid in this effort. Additionally, in February 2023, our board of directors constituted a new committee of the board, the Strategic Transition Committee, to assist in the identification, transition and retention of a successor chief executive officer, including to work with the engaged search firm to accomplish the foregoing, to provide support to our management team throughout the transition, and to perform other duties as may be necessary or desirable from time to time in connection with the reorganization of the Company. Members of the Strategic

Transition Committee consist of Jack Harrison (chair of the committee), Gioia Messinger and Kenneth Potashner. As compensation for the services that they are expected to perform as members of the Strategic Transition Committee (i) Mr. Harrison and Ms. Messinger shall be entitled to receive $2,000 per month in cash, commencing January 1, 2023 and continuing for so long as the Strategic Transition Committee remains in effect, which cash payments shall be paid to each of the relevant members in one lump sum at or about such time that the Strategic Transition Committee is disbanded, and (ii) Mr. Potashner shall be entitled to receive (A) 3,333 shares of Company common stock per month, commencing November 1, 2022 and continuing for so long as the Strategic Transition Committee remains in effect, which shares shall be issued to Mr. Potashner in one grant at or about such time that the Strategic Transition Committee is disbanded, and (B) a one-time cash payment equal to 30% of the total value of the shares issued to Mr. Potashner to cover taxes payable in connection with the issuance of such shares.

The negative impact of the COVID-19 pandemic and the impact on the global economy and capital markets resulting from the geopolitical instability caused in part by the ongoing military conflict between Russia and Ukraine, including inflation and Federal Reserve interest rate increases, have contributed to global supply chain issues and economic uncertainty, which has negatively affected our operations. Additionally, the general consensus among economists continues to suggest that we should expect a higher recession risk to continue for the foreseeable future, which could result in further economic uncertainty and volatility in the capital markets in the near term and could negatively affect our operations.

Additionally, in March 2023, Silicon Valley Bank and Signature Bank were closed and taken over by the FDIC, which created significant market disruption and uncertainty for those who bank with those institutions, and which raised significant concern regarding the stability of the banking system in the United States, and in particular with respect to regional banks. If other banks and financial institutions enter receivership or become insolvent in the future in response to financial conditions affecting the banking system and financial markets, our ability to access our cash and cash equivalents may be threatened and such events could have a material adverse effect on our business and financial condition.

With respect to our media and entertainment business, we are seeing an acceleration in our customer's investment in cloud technology and a drive towards less intelligent compute capability at the edge to reduce the costs of their componentry. This is particularly true of their virtual products, which do not require the same level of ruggedization as this system is not typically operated in harsh environments and for which software is being developed to eventually provide a real-time cloud solution. As a result, we expect that our customer will transition to a lower cost, commodity type equipment solution. We anticipate that we will begin to experience a decrease in the demand for our high-compute, ruggedized media and entertainment focused equipment and our expertise in this area in the first half of 2023.

Currently, we are continuing to experience increased pricing, longer lead-times, unavailability of product and limited supplies, protracted delivery dates, changes in minimum order quantities to secure critical product, and/or shortages of certain parts and supplies that are necessary components for the products and services we offer to our customers. As a result, the Company is carrying increased inventory balances to ensure availability of necessary products and to secure pricing.

These global issues and concerns regarding general economic decline or recession are also impacting some of our customers, who are experiencing downturns or uncertainty in their own business operations and revenue, and as a result, these customers may need to decrease or delay their technology spending, request pricing concessions or payment extensions, or seek to renegotiate their contracts.

As a result of these global issues, as well as other factors discussed in this Annual Report, it has been difficult to accurately forecast our revenues or financial results, especially given the near and long-term impacts of the pandemic, geopolitical issues, inflation, the Federal Reserve interest rate increases and the potential for a recession. In addition, while the potential impact and duration of these issues on the economy and our business may be difficult to assess or predict, these world events have resulted in, and may continue to result in, significant disruption of global financial markets, and may reduce our ability to access additional capital, which could negatively affect our liquidity in the future. Our results of operations could be materially below our forecasts as well, which could adversely affect our results of operations, disappoint analysts and investors, or cause our stock price to decline.

Furthermore, a decrease in orders in a given period, including in connection with our media and entertainment customer's transition to the cloud, could negatively affect our revenues in future periods. These global issues and events may also have the effect of heightening many risks associated with our customers and supply chain. We may take further actions that alter our operations as may be required by federal, state, or local authorities from time to time, or which we determine are in our best interests. In addition, we may decide to postpone or abandon planned investments in our business in response to changes in our business, which may impact our ability to attract and retain customers and our rate of innovation, either of which could harm our business.

Management's plans with respect to the above are to continue their efforts towards responding to the changing economic landscape, to continue to control costs, conserve cash, strengthen margins through the introduction of new product lines focusing on artificial intelligence compute capabilities for military and industrial applications, autonomous truck diving and improve company-wide execution.

Company Website

We maintain a corporate Internet website at: http://www.onestopsystems.com.

The contents of our website are not incorporated in or otherwise to be regarded as part of this Annual Report. We file reports with the SEC which are available on our website free of charge. These reports include annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, "Section 16" filings on Form 3, Form 4, and Form 5, and other related filings, each of which is provided on our website as soon as reasonably practical after we electronically file such materials with or furnish them to the SEC. In addition, the SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including the Company.

ITEM 1A. RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this Annual Report, including our financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations," before deciding whether to invest in our common stock. The occurrence of any of the events or developments described below could harm our business, financial condition, operating results, and growth prospects. In such an event, the market price of our common stock could decline, and you may lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations.

Risk Factors Summary

Below is a summary of the principal factors that make an investment in our securities speculative or risky. This summary does not address all of the risks that we face. Additional discussion of the risks summarized in this "Risk Factors Summary" section, and other risks that we face, can be found below and should be carefully considered, together with other information included in this Annual Report.

- Business disruptions could harm our business, lead to a decline in revenues and increase our costs.
- Economic uncertainty and capital markets disruption, which has been significantly impacted by geopolitical instability, could harm our financial condition and results of operations.
- Volatile or recessionary conditions in the United States or abroad could adversely affect our business and/or our access to capital markets in a material manner.
- Adverse developments affecting the financial services industry, such as actual events or concerns involving liquidity, defaults, or non-performance by financial institutions or transactional counterparties, could adversely affect our current and projected business operations and our financial condition and results of operations.
- We may be adversely affected by the effects of inflation.
- The market for our products is developing and may not develop as we expect.
- Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or our guidance.
- Our products are subject to competition, including competition from the customers to whom we sell, and new entrants and the introduction of other distribution models in our markets may harm our competitive position.
- Certain members of our senior management team and board of directors may have limited experience in certain sectors of the AI Transportable market that we are targeting.
- Changes in U.S. government defense spending could negatively impact our financial position, results of operations, liquidity and overall business.

•If we are unable to manage our growth and expand our operations successfully, our business and operating results will be harmed, and our reputation may be damaged.

•A limited number of customers represent a significant portion of our sales, and the loss of any key customers could cause our sales to decrease significantly.

•We rely on a limited number of parts suppliers to support our manufacturing and design processes.

•Our future success depends on our ability to develop and successfully introduce new and enhanced products that meet the needs of our customers, as well as our ability to maintain our production schedule.

•Unsuccessful government programs or OEM contracts could lead to reduced revenues.

•Our inventory may rapidly become obsolete.

•We offer an extended product warranty to cover defective products at no cost to the customer. If our products contain significant defects, we could incur significant expenses to remediate such defects, our reputation could be damaged, and we could lose market share.

•If we fail to achieve design wins for our products, our business will be harmed.

•If we cannot retain, attract, and motivate key personnel, we may be unable to effectively implement our business plan.

•Any future acquisitions could require significant management attention, disrupt our business, result in dilution to our stockholders, deplete our cash reserves, and adversely affect our financial results.

•The continuing commoditization of HPC hardware and software has resulted in increased pricing pressure.

•If we are unable to protect our proprietary design and intellectual property rights and/or the confidentiality of our trade secrets our competitive position could be harmed, or we could be required to incur significant expenses to enforce our rights.

•Many of our proprietary designs are in digital form and the breach of our computer systems could result in these designs being stolen.

•Our proprietary designs are susceptible to reverse engineering by our competitors.

•Claims by others that we, our channel partners or our end-customers infringe their intellectual property or trade secret rights could harm our business, including due to the fact that we are generally obligated to indemnify our channel partners and end-customers for certain expenses and liabilities resulting from intellectual property infringement claims regarding our products.

•Privacy concerns relating to our products and services could damage our reputation, deter current and potential users from using our products and services, result in liability, or result in legal or regulatory proceedings.

•Our international operations subject us to a variety of risks and challenges.

•New regulations or standards or changes in existing regulations or standards in the United States or internationally related to our suppliers' products may result in unanticipated costs or liabilities, which could have a material adverse effect on our business, operating results and future sales, and could place additional burdens on the operations of our business.

•We could be adversely affected by violations of the U.S. Foreign Corrupt Practices Act and similar worldwide anti-bribery laws.

•The price of our common stock may be volatile, and the price could decline if securities or industry analysts issue an adverse opinion regarding our stock or do not publish research or reports about our company or if there are substantial future sales of shares of our common stock, amongst other things.

•Our directors and principal stockholders own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

•Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of the Company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

- Our inability to raise additional capital on acceptable terms in the future may limit our ability to develop and commercialize new solutions and technologies and expand our operations.
- We have never paid, and do not expect to pay, any cash dividends to holders of our common stock for the foreseeable future.
- We are an "emerging growth company" and a "smaller reporting company" and we cannot be certain if the reduced disclosure requirements applicable to emerging growth and smaller reporting companies will make our common stock less attractive to investors.

Risks Related to Our Business and Industry

***Navigating the demand, supply, and operational challenges associated with the ongoing coronavirus (COVID-19) pandemic and other macroeconomic factors unsuccessfully may affect our financial condition and results of operations*.**

COVID-19 spread worldwide commencing in 2021, resulting in shutdowns and continuing interruptions of manufacturing and commerce, which impacted both our business as well as that of many of our customers. Although many of the impacts of the pandemic that most severely impacted our business have now significantly subsided, the COVID-19 pandemic has increased economic and demand uncertainty. Supply chain disruptions, resulting from factors such as the COVID-19 pandemic, inflation, labor supply, shipping container shortages and other macroeconomic factors, have impacted, and may continue to impact, us and our customers, vendors, and suppliers. These disruptions have resulted in longer lead times and, increased product costs and shipping expenses. It is not currently possible to predict how long it will take for these supply chain disruptions to cease. The Company has experienced protracted timelines and shortages for delivery of our products as a result of such supply chain disruptions.

In addition, while the extent and duration of the COVID-19 pandemic and other macroeconomic factors on the global economy and our business in particular is difficult to assess or predict, the pandemic and various other factors have resulted in, and may continue to result in, significant disruption of global financial markets, which may reduce our ability to access capital or our customers' ability to pay us for past or future purchases, which could negatively affect our liquidity. A recession or financial market correction could impact overall technology spending, adversely affecting demand for our products, our business and the value of our common stock.

The extent of the impact of the COVID-19 pandemic, global instability and other microeconomic factors on our operational and financial performance, including our ability to execute our business strategies and initiatives in the expected time frame, will depend on future developments, including, but not limited to, the duration, timing and severity of the impact on customer spending, including any recession in the U.S. or elsewhere in the world, all of which are uncertain and cannot be predicted. An extended period of global supply chain and economic disruption could have a material negative impact on our business, results of operations, access to sources of liquidity and financial condition, though the full extent and duration is uncertain.

Business disruptions could harm our business, lead to a decline in revenues and increase our costs.

Our worldwide operations could be disrupted by earthquakes, telecommunications failures, power or water shortages, outages at cloud service providers, tsunamis, floods, hurricanes, typhoons, fires, extreme weather conditions, cyber-attacks, terrorist attacks, war or military conflicts (such as the ongoing military conflict between Russia and Ukraine), medical epidemics or pandemics (including, but not limited to, COVID-19) and other natural or man-made disasters, catastrophic events or climate change. The occurrence of any of these disruptions could harm our business and result in significant losses, a decline in revenue and an increase in our costs and expenses. Any of these business disruptions could require substantial expenditures and recovery time in order to fully resume operations.

Our corporate headquarters, and a portion of our research and development activities, are located in California, and other critical business operations, finished goods inventory, and some of our suppliers are located in Europe and Asia, near major earthquake faults known for seismic activity. The manufacture of product components, the final assembly of our products and other critical operations are concentrated in certain geographic locations, including California, Germany, and China. Geopolitical change or changes in government regulations and policies in the United States or abroad may result in changing regulatory requirements, economic sanctions (such as those recently imposed by the United States and other countries on Russia), trade policies, import duties and economic disruptions that could impact our operating strategies, product demand, access to global markets, hiring, and profitability. In particular, revisions to laws or regulations or their interpretation and enforcement could result in increased taxation, trade sanctions, the imposition of import duties or tariffs, restrictions and controls on imports or exports, or other retaliatory actions, which could have an adverse effect on our business plans. For example, regulations to implement the Export Control Reform Act of 2018 could have an adverse effect on our business plans.

Catastrophic events can also have an impact on third-party vendors who provide us with critical infrastructure services for IT and research and development systems and personnel. In addition, geopolitical and domestic political developments, such as existing and potential trade wars, political or social unrest, military conflicts, elections and post-election developments, and other events beyond our control, can increase levels of political and economic unpredictability globally and increase the volatility of global financial markets. Political instability or adverse political developments in or around any of the major countries in which we do business would also likely harm our business, financial condition, and results of operations. Our operations could be harmed if manufacturing, logistics or other operations in these locations are disrupted for any reason, including natural disasters, high heat events or water shortages, information technology system failures, military actions or economic, business, labor, environmental, public health, regulatory or political issues. The ultimate impact on us, our third-party vendors and other suppliers and our general infrastructure of being located near major earthquake faults and being consolidated in certain geographical areas is unknown. In the event a major earthquake or other disaster or catastrophic event affects us or the third-party systems on which we rely, our business could be harmed as a result of declines in revenue, increases in expenses, substantial expenditures and time spent to fully resume operations. All of these risks and conditions could materially adversely affect our future sales and operating results.

We are currently operating in a period of economic uncertainty and capital markets disruption, which has been significantly impacted by geopolitical instability. Our business, financial condition and results of operations could be materially adversely affected by any negative impact on the global economy and capital markets resulting from the conflict between Russia and Ukraine or any other geopolitical tensions.

US and global markets are experiencing volatility and disruption following the escalation of geopolitical tensions and the start of the military conflict between Russia and Ukraine. On February 24, 2022, a full-scale military invasion of Ukraine by Russian troops was reported, which remains ongoing. Since then, international relations between the U.S. and Russia, as well as certain other countries, has been strained and may continue to deteriorate further. Although the length and impact of the ongoing military conflict is highly unpredictable, the conflict in Ukraine could lead to market disruptions, including significant volatility in commodity prices, credit and capital markets, as well as supply chain interruptions. We are continuing to monitor the situation in Ukraine and globally and assessing its potential impact on our business.

Additionally, the recent military conflict in Ukraine has led to sanctions and other penalties being levied by the United States, European Union and other countries against Russia. Additional potential sanctions and penalties have also been proposed and/or threatened. Russian military actions and the resulting sanctions could adversely affect the global economy and financial markets and lead to instability and lack of liquidity in capital markets, potentially making it more difficult for us to obtain additional funds.

Although our business has not been materially impacted by the ongoing military conflict between Russian and Ukraine or other geopolitical instability to date, it is impossible to predict the extent to which our operations, or those of our suppliers and manufacturers, will be impacted in the short and long term, or the ways in which the conflict may impact our business. The extent and duration of the military action, sanctions and resulting market disruptions are impossible to predict, but could be substantial. Any such disruptions may also magnify the impact of other risks described in this Annual Report.

Volatile or recessionary conditions in the United States or abroad could adversely affect our business or our access to capital markets in a material manner.

Worsening economic and market conditions, downside shocks, or a return to recessionary economic conditions could severely reduce demand for our products and adversely affect our operating results. These economic conditions may also impact the financial condition of one or more of our key suppliers, which could affect our ability to secure product to meet our customers' demand. Our results of operations and the implementation of our business strategy could be adversely affected by general conditions in the global economy. An economic downturn may cause uncertainty in the capital and credit markets and could have a material adverse effect on us. We could also be adversely affected by such factors as changes in foreign currency rates, weak economies, and political conditions in each of the countries in which we sell our products.

Adverse developments affecting the financial services industry, such as actual events or concerns involving liquidity, defaults, or non-performance by financial institutions or transactional counterparties, could adversely affect our current and projected business operations and our financial condition and results of operations.

Actual events involving reduced or limited liquidity, defaults, non-performance or other adverse developments that affect financial institutions or other companies in the financial services industry or the financial services industry generally, or concerns or rumors about any events of these kinds, have in the past and may in the future lead to market-wide liquidity problems. For example, in March 2023, Silicon Valley Bank and Signature Bank were closed and taken over by the Federal Deposit Insurance Corporation ("FDIC") as receiver. Although we did not have any cash or cash equivalent balances on deposit with Silicon Valley Bank or Signature Bank, investor concerns regarding the U.S. or international financial systems could result in less favorable commercial financing terms, including higher interest rates or costs and tighter financial and operating covenants, or systemic limitations on access to credit and liquidity sources, thereby making it more difficult for us to acquire financing on acceptable terms or at all. Any decline in available funding or access to our cash and liquidity resources could, among other risks, adversely impact our ability to meet our operating expenses, financial obligations or fulfill our other obligations, or result in breaches of our financial and/or contractual obligations. Any of these impacts, or any other impacts resulting from the factors described above or other related or similar factors not described above, could have material adverse impacts on our liquidity and our current and/or projected business operations and financial condition and results of operations.

We may be adversely affected by the effects of inflation.

Inflation has the potential to adversely affect our liquidity, business, financial condition and results of operations by increasing our overall cost structure, particularly if we are unable to achieve commensurate increases in the prices we charge our customers. The existence of inflation in the economy has resulted in, and may continue to result in, higher interest rates and capital costs, shipping costs, supply shortages, increased costs of labor, weakening exchange rates and other similar effects. As a result of inflation, we have experienced and may continue to experience, cost increases. Although we may take measures to mitigate the impact of this inflation, if these measures are not effective our business, financial condition, results of operations and liquidity could be materially adversely affected. Even if such measures are effective, there could be a difference between the timing of when these beneficial actions impact our results of operations and when the cost inflation is incurred.

The market for our products is developing and may not develop as we expect.

The market for cutting-edge, high-performance computing products is characterized by rapid advances in technologies. We believe our future success will depend in large part on our ability to develop products, new business initiatives and creating innovative and custom designs for our customers. The growth of server clusters, specialized or high-performance applications, and hosted software solutions which require fast and efficient data processing, is crucial to our success. It is difficult to predict the development of the demand for high-performance computing, supercomputers, and related hardware solutions, the size and growth rate for this market, the entry of competitive products, or the success of existing competitive products. Any expansion in our market depends on several factors, including the demand, cost, performance, and perceived value associated with our products. If our products are not adopted or there is a reduction in demand for our products caused by a lack of customer acceptance, a slowdown in demand for computational power, an overabundance of unused computational power, technological challenges, competing technologies and products, decreases in corporate spending, weakening economic conditions, or otherwise, it could result in reduced customer orders, early order cancellations, the loss of customers, or decreased sales, any of which would adversely affect our business, operating results, and financial condition.

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or our guidance.

Our quarterly and annual operating results have fluctuated in the past and may fluctuate significantly in the future, which makes it difficult for us to predict our future operating results. The timing and size of sales of our products are variable and difficult to predict and can result in fluctuations in our net sales from period to period. In addition, our budgeted expense levels depend in part on our expectation of future sales. Any substantial adjustment to expenses to account for lower levels of sales is difficult and takes time, thus we may not be able to reduce our costs sufficiently to compensate for a shortfall in net sales, and even a small shortfall in net sales could disproportionately and adversely affect our operating margin and operating results for a given quarter.

Our operating results may also fluctuate due to a variety of other factors, many of which are outside of our control, including the changing and volatile local, national, and international economic environments, any of which may cause our stock price to fluctuate. Besides the other risks in this “Risk Factors” section, factors that may affect our operations include, without limitation:

- Fluctuations in demand for our products and services;
- The inherent complexity, length, and associated unpredictability of product development windows and product lifecycles;
- Changes in customers’ budgets for technology purchases and delays in their purchasing cycles;
- Changing market conditions;
- Any significant changes in the competitive dynamics of our markets, including new entrants, or further consolidation;
- Our ability to continue to broaden our customer base beyond our traditional customers;
- The timing of product releases or upgrades by us or our competitors; and
- Our ability to develop, introduce, and ship in a timely manner new products and product enhancements and anticipate future market demands that meet our customers’ requirements.

Each of these factors individually, or the cumulative effect of two or more of these factors, could result in large fluctuations in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. You should not rely on our past results as an indication of future performance.

Our products are subject to competition, including competition from the customers to whom we sell.

Servers, computer accelerators, flash storage arrays, PCIe expansion products, and other products that we design, manufacture, and sell or license are subject to competition. The computer hardware and technology fields are well established with limited, and in many cases no, intellectual property and technological barriers to entry. The markets in which we operate are competitive and we expect competition to increase in the future from established competitors and new market entrants. The markets are influenced by, among others, brand awareness and reputation, price, strength and scale of sales and marketing efforts, professional services and customer support, product features, reliability and performance, scalability of products, and breadth of product offerings. Due to the nature of our products, competition occurs at the design, performance, and sales stages. A design or sales win by us does not limit further competition and our customers may purchase competitive products from third parties at any time. This competition could result in increased pricing pressure, reduced profit margins, increased sales and marketing expenses and failure to increase, or the loss of, market share, any of which would likely seriously harm our business, operating results, or financial condition. From a cost and control perspective, our products are specialized and thus generally cost more than our competitors’ products. If our ability to design specialized solutions is deemed to be on par or of lesser value than competing solutions, we could lose our customers and prospects.

Many of our customers and competitors, often with substantially more resources or larger economies of scale, produce products that are competitive with our products. Many of these third parties mass-produce hardware solutions and have not heavily invested in or allocated resources to the smaller scale specialized products and solutions we design. A decrease in the cost of general mass-produced hardware solutions, which can serve as a substitute for our products, or the entrance or additional allocation of resources by one of these customers or competitors into the production of specialized systems which compete with our products could create increased pricing pressure, reduced profit margins, increased sales and marketing expenses, or the loss of market share or expected market share, any of which may significantly harm our business, operating results and financial condition.

New entrants and the introduction of other distribution models in our markets may harm our competitive position.

The markets for development, distribution, and sale of our high-performance computing solutions are rapidly evolving. New entrants seeking to gain market share by introducing new technology, new products and new server configurations may make it more difficult for us to sell our products and earn design wins, which could create increased pricing pressure, reduced profit margins, increased sales and marketing expenses, or the loss of market share or expected market share, any of which may significantly harm our business, operating results and financial condition.

Large computer hardware and equipment manufacturers and suppliers have traditionally designed, produced, and sold general purpose servers, and storage arrays and related products and equipment. Our customers supplement these general-purpose systems by purchasing our specialized or customized systems or supplemental products which improve the speed, efficiency, or performance of such systems. If the speed, efficiency, or computational power of such general purpose systems increases such that supplemental or specialized products become unnecessary, or the cost of such general purpose systems declines such that it is more cost effective for prospective customers to add general-purpose equipment rather than specialized or supplemental equipment, we could experience a significant decline in demand for the products which may significantly harm to our business, operating results and financial condition.

Our products compete with and supplement general purpose servers, storage systems and related equipment. If the producers of general-purpose equipment implement proprietary standards, software, interfaces, or other interoperability restrictions, including controls which restrict the equipment's compatibility with third party systems, we could experience a significant decline in sales because our products would not be interoperable with such systems, resulting in significant harm to our business, operating results and financial condition.

In our marketplace, general-purpose equipment is traditionally mass-produced and available to order, while specialized equipment and custom bulk-order equipment is subject to a bid-based purchase system. If one or more large manufacturers of general or standard server storage arrays, or related products and equipment, provide specialized, customized, or supplementary equipment on a made-to-order or generally available basis, we could be forced to reduce our prices or change our selling model to remain competitive which would significantly harm to our business, operating results and financial condition.

Certain members of our senior management team and board of directors may have limited experience certain sectors of the AI Transportable market that we are targeting.

Certain members of our senior management team and board of directors may have limited experience with respect to sectors of the AI Transportable market that we are targeting, and in particular the military sector, and may have limited experience in other sectors, industries and markets which we may choose to enter in the future. Our management team relies on the knowledge and talent of our employees as well as members of our advisory board to successfully navigate and obtain project wins in our target markets. Further, management works closely with our board of directors in order to make strategic decisions, to assess risk and to better ensure that the Company's actions are aligned with the best interests of our shareholders. As discussed elsewhere in this Annual Report, we have recently undergone certain organizational changes to better align our structure and human capital resources with our goals, and have engaged a search firm to help us identify successor chief executive officer and vice president of sales candidates with more significant experience and high-level contacts in the defense sector. We may not be able to identify, retain, hire or train personnel with relevant experience as quickly or efficiently as we need or on terms that are acceptable to us, which could negatively impact our ability to scale our opportunities and growth at the rate that we hope to. An inability to efficiently operate our businesses and execute on our business strategy would have a material adverse effect on our business, financial conditions, results of operations, and prospects.

Changes in U.S. government defense spending could negatively impact our financial position, results of operations, liquidity and overall business.

As we turn our focus to military AI Transportable applications for our products, we expect that sales to prime contractors and U.S. governmental entities will constitute an increasingly significant portion of our sales. We expect that our U.S. government revenues will largely result from contracts awarded under various U.S. government programs, primarily defense-related programs with the DOD, and other departments and agencies. Changes in U.S. government defense spending for various reasons, including as a result of potential changes in policy, administration, or budgetary positions, priorities, and protracted lead times could negatively impact our results of operations, financial condition and liquidity. The sale of our products to such defense customers are subject to U.S. government policies, budget decisions and appropriation processes, which are driven by numerous factors that are out of our control, including U.S. domestic and broader geopolitical events, macroeconomic conditions, and the ability of the U.S. government to enact relevant legislation. In recent years, U.S. government appropriations have been affected by larger U.S. government budgetary issues and related legislation, and the U.S. government has been unable to complete its budget process before the end of its fiscal year, resulting in both governmental shutdowns and continuing resolutions ("CRs") providing only enough funds for U.S. government agencies to continue operating at prior-year levels. Further, if the U.S. government debt ceiling is not raised and the national debt reaches the statutory debt ceiling, the U.S. government could default on its debts. As a result, U.S. government defense spending levels are subject to a wide range of outcomes and are difficult to predict beyond the near-term due to numerous factors, including the external threat environment, future governmental priorities and the state of governmental finances. Significant changes in U.S. government defense spending or changes in U.S. government priorities, policies and requirements could have a material adverse effect on our current business strategy and results of operations, financial condition and liquidity.

If we are unable to manage our growth and expand our operations successfully, our business and operating results will be harmed, and our reputation may be damaged.

We have expanded our operations significantly since inception and anticipate that further significant expansion will be required to achieve our business objectives. The growth and expansion of our business and product offerings places a continuous and significant strain on our management, operational and financial resources. Any such future growth would also add complexity to and require effective coordination throughout our organization. To manage any future growth effectively, we must continue to improve and expand our information technology and financial infrastructure, our operating and administrative systems and controls, and our ability to manage headcount, capital, and processes in an efficient manner. We may not be able to successfully implement improvements to these systems and processes in a timely or efficient manner, which could result in additional operating inefficiencies and could cause our costs to increase more than planned. If we do increase our operating expenses in anticipation of the growth of our business and this growth does not meet our expectations, our operating results may be negatively impacted. If we are unable to manage future expansion, our ability to provide high quality products and services could be harmed, which could damage our reputation and brand, and may have a material adverse effect on our business, operating results and financial condition.

A limited number of customers represent a significant portion of our sales. If we were to lose any of these customers, our sales could decrease significantly.

In the years ended December 31, 2022 and 2021, approximately 37.4% and 41.5%, respectively, of net sales were attributable to three customers, including disguise, Raytheon and the Navy. In addition, a few products comprise a significant amount of our sales, and the discontinuation, modification, or obsolescence of such products could materially and adversely affect our sales and results of operations. As discussed elsewhere in this Annual Report, we expect that disguise will transition to a lower cost, commodity type equipment solution and anticipate that we will begin to experience a decrease in the demand from disguise for our media and entertainment focused equipment and expertise in this area in the first half of 2023. Any loss of, or a significant reduction in purchases by, our significant customers, including disguise, or a decrease in the high-performance applications that drive the use of our products, or the modification, discontinuation, or obsolescence of a device which constitutes a significant portion of our sales could have an adverse effect on our financial condition and operating results.

Some of our contracts allow our customers to have access to the design drawings for products which we have designed and manufactured for them.

Some of our contracts allow our customers to have access to the design drawings for products that we have designed and manufactured for them. In some cases, these drawings are included as a deliverable in conjunction with their non-recurring engineering fee, and in other cases, an additional fee is required to obtain the drawings package. Since these customers have access to the drawings, there is no guarantee that they will continue to purchase the manufactured products from us. This arrangement applies particularly to disguise. To our knowledge, our current customers have not had any of the OSS-designed products manufactured by anyone other than OSS, but they may have the capability to do so in the future.

We rely on a limited number of parts suppliers to support our manufacturing and design processes.

We rely on a limited number of suppliers to provide us with the necessary devices, parts, and systems to allow us to build, design and manufacture our products, and the failure to manage our relationships with these parties successfully, or disruptions to our suppliers' businesses caused by supply chain constraints, inflation, human capital issues, and/or other factors, could adversely affect our ability to market and sell our products. In the years ended December 31, 2022 and 2021, suppliers for which purchases represent greater than 10% of our total parts purchases accounted for approximately 25.0% and 12.6% of materials purchased, respectively. This concentration is with one supplier, Concisys Inc.

Although we do believe we could locate additional suppliers to fulfill our needs in the event that our relationship with Concisys Inc. or any of our other suppliers terminated or they are unable to fulfill our manufacturing needs, any significant change in our relationship with these suppliers could have a material adverse effect on our business, operating results, and financial condition unless and until we are able to find suitable replacements. We make substantially all of our purchases from our contract suppliers on a purchase order basis. Our suppliers are not required to supply our raw materials for any specific period or in any specific quantity or price.

Global pandemics or other disasters or public health concerns in regions of the world where we have operations or source material or sell products, such as outbreaks of COVID-19 or H1N1 flu, could result in the disruption of our business. These or any governmental developments or health concerns in countries in which we operate could result in social, economic, or labor instability. Any disruption resulting from these or similar events could cause significant delays in shipments of our products until we are able to resume normalized operations, and this could have a material negative impact on our results of operations and cash flows. We do not yet know the full extent of potential delays or impacts on our business, operations, or the global economy resulting from COVID-19, economic instability and/or other macroeconomic factors. Currently, we are experiencing unavailability of certain products and limited supplies, protracted delivery dates for componentry, increasing product costs, and changes in minimum order quantities to secure product. As a result, we are carrying increased inventory balances to ensure availability of necessary products and to secure pricing.

Our future success depends on our ability to develop and successfully introduce new and enhanced products that meet the needs of our customers.

Our sales depend on our ability to anticipate our existing and prospective customers' needs and develop products that address those needs. Our future success will depend on our ability to design new products, anticipate technological improvements and enhancements, and to develop products that are competitive in the rapidly changing computer hardware and software industry, and in the AI Transportable space in particular. Introduction of new products and product enhancements will require coordination of our efforts with those of our customers, suppliers, and manufacturers to develop products that offer performance features desired by our customers and performance and functionality superior or more cost effective than solutions offered by our competitors. If we fail to coordinate these efforts, develop product enhancements, or introduce new products that meet the needs of our customers as scheduled, our operating results will be materially and adversely affected, and our business and prospects will be harmed. We cannot assure that product introductions will meet our anticipated release schedules or that our products will be competitive in the market. Furthermore, given the rapidly changing nature of the computer equipment market, there can be no assurance our products and technology will not be rendered obsolete by alternative or competing technologies.

Delays in our production cycle could result in outdated equipment or decreased purchases of our products.

The design and manufacture of our products can take several months to several years. The length of such process depends on the complexity and purpose of the system or equipment being designed, and may be affected by factors such as the development and design of unique or specialized systems; the fabrication, availability, and supply of parts; the customization of parts, as applicable; the manufacture and/or assembly of the units, quality control testing; and the development and incorporation of new technologies. If our products are outdated upon completion of this process, our sales could materially decline, and it may be necessary to sell products at a loss.

Unsuccessful government programs or OEM contracts could lead to reduced revenues.

We design and manufacture certain products to fit the specifications of government programs or OEM contracts. These programs may take months or years to complete and involve significant investment of our time, money, and resources. We generally receive upfront fees for these programs, but there is often little or no obligation on the part of our customer to purchase large volumes of products at the time of final product launch. Unsuccessful product launches could lead to reduced revenues and/or potential returns of products, which could have a material adverse effect on our financial condition and operating results. We may be forced to sell products at a loss or spend a significant amount of resources to find additional customers for these products if these programs do not fit the future needs of our intended customers.

Our inventory may rapidly become obsolete.

Sales cycles for some of our products can take several months or longer. In addition, it can take time from the bid to the development and manufacture of the equipment. We maintain inventory based in large part on our forecasts of the volume and timing of orders. The varying length of the sales cycles makes accurate forecasting difficult. The delays inherent in our sales cycles raise the risk that the inventory we have on hand will become obsolete or impaired prior to its use or sale. If our forecasted demand does not materialize into purchase orders, we may be required to write off our inventory balances or reduce the value of our inventory, based on a reduced sales price. A write off of the inventory, or a reduction in the inventory value due to a sales price reduction, could have an adverse effect on our financial condition and operating results.

If our products contain significant defects, we could incur significant expenses to remediate such defects, our reputation could be damaged, and we could lose market share.

Our products are complex and may contain defects or security vulnerabilities, or experience failures or unsatisfactory performance due to any number of issues in design, fabrication, packaging, materials and/or use within a system. These risks may increase as our products are introduced into new devices, markets, technologies and applications, or as new versions are released. Some errors in our products or services may only be discovered after a product or service has been shipped or used by customers or the end users of such product. Undiscovered vulnerabilities in our products or services could expose our customers or end users to hackers or other unscrupulous third parties who develop and deploy viruses, worms and other malicious software programs that could attack our products or services. Failure of our products to perform to specifications, or other product defects, could lead to substantial damage to the products we sell directly to customers, the end product in which our device has been integrated by OEMs and to the user of such end product. Any such defect may cause us to incur significant warranty, support and repair or replacement costs, write off the value of related inventory, cause us to lose market share, and divert the attention of our personnel from our product development efforts to find and correct the issue. In addition, an error or defect in new products or releases or related software drivers after commencement of commercial shipments could result in failure to achieve market acceptance or loss of design wins, harm our relationships with customers and partners and harm consumers' perceptions of our brand. Also, we may be required to reimburse our customers, partners or consumers, including costs to repair or replace products in the field. A product recall, including a recall due to a bug in our products, or a significant number of product returns could be expensive, damage our reputation, harm our ability to attract new customers, result in the shifting of business to our competitors and result in litigation against us, such as product liability suits. If a product liability claim is brought against us, the cost of defending the claim could be significant and would divert the efforts of our technical and management personnel, and harm our business. Further, our business liability insurance may be inadequate or future coverage may be unavailable on acceptable terms, which could adversely impact our financial results.

We offer an extended product warranty to cover defective products at no cost to the customer. An unexpected change in failure rates of our products could have a material adverse impact on our business.

We offer product warranties that generally extend for one or two years from date of sale that require us to repair or replace defective products returned by the customer during the warranty period at no cost to the customer. Our product warranties are in addition to warranties we receive from our vendors. Existing and future product guarantees and warranties place us at the risk of incurring future returns and repair and/or replacement costs.

While we engage in product quality programs and processes, including monitoring and evaluating the quality of our components sourced from our suppliers, our warranty obligation is affected by actual product defect rates, parts and equipment costs and service labor costs incurred in correcting a product defect. We record an estimate for anticipated warranty-related costs based on historical and estimated future product return rates and expected repair or replacement costs. Although such costs have historically been within management's expectations and our warranty reserves (when coupled with warranty coverage provided by our vendors) have been sufficient to cover such costs, our reserves set aside to cover warranty returns may be inadequate due to an unanticipated number of customer returns, undetected product defects, unanticipated component failures or changes in estimates for material, labor and other costs we may incur to replace projected product defects. As a result, if actual customer returns, product defect rates, parts and equipment costs or service labor costs exceed our estimates, or we experience unexpected changes in failure rates, we could experience a material adverse effect on our business, financial condition and results of operations.

If we fail to achieve design wins for our products, our business will be harmed.

Achieving design wins is an important success factor for our business. We work closely with OEMs and end users to ensure the customer gets the product they want in the specific configuration, size and weight required for the application. We have participated in many design wins based upon our ability to interpret technical specifications and proceed rapidly through prototyping, development, and delivery. This approach and expertise are two of the factors driving our growth. Failure to maintain our expertise and ability to deliver custom, specific design systems could harm our business. In order to achieve design wins, we must:

- anticipate the features and functionality that OEMs, customers and consumers will demand;
- incorporate those features and functionalities into products that meet the exacting design requirements of our customers; and
- price our products competitively.

Unanticipated changes in industry standards could render our products incompatible with products developed by major hardware manufacturers and software developers. Further, if our products are not in compliance with prevailing industry standards, our customers may not incorporate our products into their design strategies.

If we cannot retain, attract, and motivate key personnel, we may be unable to effectively implement our business plan.

Our success depends in large part upon our ability to retain, attract and motivate highly skilled management, development, marketing, sales, and service personnel. The loss of and failure to replace key technical management and personnel could adversely affect multiple development efforts. As discussed elsewhere in this Annual Report, in connection with our announcement that David Raun, our current chief executive officer, will be stepping down, we have engaged a search firm to assist in the identification of candidates to fill the role of chief executive officer of the Company. We have not yet identified a candidate to fill this role. There will be a transition period once a successor chief executive officer is identified and hired, and there can be no guarantees the candidate who is selected to fill the role will be able to successfully execute on our business strategies.

We have entered into employment agreements with most of our executive officers, though they may terminate employment with us at any time, for any reason and with no advance notice. We may lose key personnel to other high technology companies or to other larger companies with significantly greater resources than us who may recruit our key personnel. The replacement of members of our senior management team or other key personnel may involve significant time and costs, and the loss of these employees could significantly delay or prevent the achievement of our business objectives.

Recruitment and retention of senior management and skilled technical, sales and other personnel is very competitive, and we may not be successful in either attracting or retaining such personnel. As part of our strategy to attract and retain key personnel, we may offer equity compensation through grants of stock options, restricted stock awards or restricted stock units. Potential employees, however, may not perceive our equity incentives as attractive enough. In addition, due to the intense competition for qualified employees, we may be required to, and have had to, increase the level of compensation paid to existing and new employees, which could materially increase our operating expenses.

We have made in the past, and may make in the future, acquisitions which could require significant management attention, disrupt our business, result in dilution to our stockholders, deplete our cash reserves and adversely affect our financial results.

Acquisitions involve numerous risks, including, without limitation, the following:

•difficulties in successfully integrating the operations, systems, technologies, products, offerings and personnel of the acquired company or companies;

•insufficient revenue to offset increased expenses associated with acquisitions;

•diversion of management's attention from normal daily operations of the business and the challenges of managing larger and more widespread operations resulting from acquisitions;

•potential difficulties in completing projects associated with in-process research and development intangibles;

•difficulties in entering markets in which we have no or limited direct prior experience and where competitors in such markets have stronger market positions;

•initial dependence on unfamiliar supply chains or relatively small supply partners; and

•the potential loss of key employees, customers, distributors, vendors and other business partners of the companies we acquire following and continuing after announcement of acquisition plans.

Acquisitions may also cause us to:

•use a substantial portion of our cash reserves or incur debt;

•issue equity securities or grant equity incentives to acquired employees that would dilute our current stockholders' percentage ownership;

•assume liabilities, including potentially unknown liabilities;

- record goodwill and non-amortizable intangible assets that are subject to impairment testing on a regular basis and potential periodic impairment charges;
- incur amortization expenses related to certain intangible assets;
- incur large and immediate write-offs and restructuring and other related expenses; or
- become subject to intellectual property litigation or other litigation.

Acquisitions of high-technology companies and assets are inherently risky and subject to many factors outside of our control and no assurance can be given that our completed or future acquisitions will be successful and will not materially adversely affect our business, operating results, or financial condition. Failure to manage and successfully integrate acquisitions could materially harm our business and operating results.

The continuing commoditization of HPC hardware and software has resulted in increased pricing pressure and may adversely affect our operating results.

The continuing commoditization of HPC hardware, such as processors, interconnects, flash storage and other infrastructure, and the growing commoditization of software, including plentiful building blocks and more capable open source software, as well as the potential for integration of differentiated technology into already-commoditized components, has resulted in, and may result in increased pricing pressure that may cause us to reduce our pricing in order to remain competitive, which can negatively impact our gross margins and adversely affect our operating results.

Risks Relating to Intellectual Property

If we are unable to protect our proprietary design and intellectual property rights, our competitive position could be harmed, or we could be required to incur significant expenses to enforce our rights.

Our ability to compete effectively is dependent in part upon our ability to protect our proprietary technology. We rely on patents, trademarks, trade secret laws, confidentiality procedures and licensing arrangements to protect our intellectual property rights. There can be no assurance these protections will be available in all cases or will be adequate to prevent our competitors from copying, reverse engineering or otherwise obtaining and using our technology, proprietary rights or products. For example, the laws of certain countries in which our products are manufactured or licensed do not protect our proprietary rights to the same extent as the laws of the United States. In addition, third parties may seek to challenge, invalidate, or circumvent our patents, trademarks, copyrights and trade secrets, or applications for any of the foregoing. There can be no assurance that our competitors will not independently develop technologies that are substantially equivalent or superior to our technology or design around our proprietary rights. In each case, our ability to compete could be significantly impaired.

To prevent substantial unauthorized use of our intellectual property rights, it may be necessary to prosecute actions for infringement and/or misappropriation of our trade secrets and/or proprietary rights against third parties. Any such action could result in significant costs and diversion of our resources and management’s attention, and there can be no assurance we will be successful in such action. Furthermore, many of our current and potential competitors have the ability to dedicate substantially greater resources to enforce their intellectual property rights than we do. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our trade secrets and/or intellectual property.

Many of our proprietary designs are in digital form and the breach of our computer systems could result in these designs being stolen.

If our cybersecurity measures are breached or unauthorized access to private or proprietary data is otherwise obtained, our proprietary designs could be stolen. Because we hold many of these designs in digital form on our servers, there exists an inherent risk that an unauthorized third party could conduct a cybersecurity breach resulting in the theft of our proprietary information. While we have taken cybersecurity steps to protect our proprietary information, because techniques used to obtain unauthorized access or sabotage systems change frequently and generally are not identified until they are launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. Any or all of these issues could negatively impact our competitive edge and our ability to obtain new customers thereby adversely affecting our financial results.

Our proprietary designs are susceptible to reverse engineering by our competitors.

Much of the value of our proprietary rights is derived from our vast library of design specifications. While we consider our design specifications to be protected by various proprietary, trade secret and intellectual property laws, such information is susceptible to reverse engineering by our competitors. We may not be able to prevent our competitors from developing competing design specifications and the cost of enforcing these rights may be significant. If we are unable to adequately protect our proprietary designs our financial condition and operating results could suffer.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

We consider trade secrets, including confidential and unpatented know-how and designs important to the maintenance of our competitive position. We protect trade secrets and confidential and unpatented know-how, in part, by customarily entering into non-disclosure and confidentiality agreements with parties who have access to such knowledge, such as our employees, outside technical and commercial collaborators, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants that obligate them to maintain confidentiality and assign their inventions to us. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches.

Claims by others that we infringe their intellectual property or trade secret rights could harm our business.

Our industry is characterized by vigorous protection and pursuit of intellectual property rights, which has resulted in protracted and expensive litigation for many companies. Third parties may in the future assert claims of infringement of intellectual property rights against us or against our customers or channel partners for which we may be liable. As the number of products and competitors in our market increases and overlaps occur, infringement claims may increase.

Intellectual property or trade secret claims against us, and any resulting lawsuits, may result in us incurring significant expenses and could subject us to significant liability for damages and invalidate what we currently believe are our proprietary rights. Our involvement in any patent dispute or other intellectual property dispute or action to protect trade secrets and know-how could have a material adverse effect on our business. Adverse determinations in any litigation could subject us to significant liabilities to third parties, require us to seek licenses from third parties and prevent us from manufacturing and selling our products. Any of these situations could have a material adverse effect on our business. These claims, regardless of their merits or outcome, would likely be time consuming and expensive to resolve and could divert management's time and attention.

We are generally obligated to indemnify our channel partners and end-customers for certain expenses and liabilities resulting from intellectual property infringement claims regarding our products, which could force us to incur substantial costs.

We have agreed, and expect to continue to agree, to indemnify our channel partners and end-customers for certain intellectual property infringement claims regarding our products. As a result, in the case of infringement claims against these channel partners and end-customers, we could be required to indemnify them for losses resulting from such claims or to refund amounts they have paid to us. Our channel partners and other end-customers in the future may seek indemnification from us in connection with infringement claims brought against them regarding our products. These claims, regardless of their merits or outcome, would likely be time consuming expensive to resolve, and could divert management's time and attention from managing our business.

Privacy concerns relating to our products and services could damage our reputation, deter current and potential users from using our products and services, result in liability, or result in legal or regulatory proceedings.

Our products and services may provide us with access to sensitive, confidential, or personal data or information that is subject to privacy and security laws and regulations. Concerns about our practices with regard to the collection, use, retention, security or disclosure of personal information or other privacy-related matters, even if unfounded, could damage our reputation and adversely affect our operating results. The theft, loss, or misuse of personal data collected, used, stored, or transferred by us to run our business or by one of our partners could result in significantly increased security costs, damage to our reputation, regulatory proceedings, disruption of our business activities or increased costs related to defending legal claims.

Worldwide regulatory authorities are considering and have approved various legislative proposals concerning data protection, which continue to evolve and apply to our business. For example, the European Union adopted the General Data Protection Regulation ("GDPR"), which took effect in May 2018 and requires companies to meet requirements regarding the handling of personal data, including its use, protection, and the ability of persons whose data is stored to correct or delete such data about themselves. Failure to meet GDPR requirements, to the extent applicable, could result in penalties of up to 4% of worldwide revenue. In addition, the interpretation and application of consumer and data protection laws in the United States, Europe and elsewhere are often uncertain and fluid, and may be interpreted and applied in a manner that is inconsistent with our data practices. If so, we may be ordered to change our data practices and/or be fined.

In addition, California enacted the California Consumer Privacy Act ("CCPA"), which took effect on January 1, 2020. The CCPA gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. The CCPA may increase our compliance costs and potential liability. Some observers have noted that the CCPA could mark the beginning of a trend toward more stringent state privacy, data protection, and data security legislation in the U.S., which could increase our potential liability and adversely affect our business. The CCPA was expanded substantially on January 1, 2023, when the California Privacy Rights Act of 2020 ("CPRA") became fully operative. The CPRA, among other things, gives California residents the ability to limit use of certain sensitive personal information, further restricts the use of cross-contextual advertising, establishes restrictions on the retention of personal information, expands the types of data breaches subject to the CCPA's private right of action, provides for increased penalties for CPRA violations concerning California residents under the age of 16, and establishes a new California Privacy Protection Agency to implement and enforce the new law.

Complying with these changing laws has caused, and could continue to cause, us to incur substantial costs, which could have an adverse effect on our business and results of operations. Further, failure to comply with existing or new rules may result in significant penalties or orders to stop the alleged noncompliant activity.

Risks Related to Our International Operations

Our international sales and operations subject us to additional risks that can adversely affect our operating results and financial condition.

Our international operations subject us to a variety of risks and challenges, including, without limitation, exposure to fluctuations in foreign currency exchange rates, increased management, travel, infrastructure and legal compliance costs associated with having international operations; reliance on channel partners; increased financial accounting and reporting burdens and complexities; compliance with foreign laws and regulations, which are subject to change; compliance with U.S. laws and regulations for foreign operations; conflicts between U.S. laws and regulations and foreign laws and regulations; import and export licensing requirements; and reduced protection for intellectual property rights in some countries and practical difficulties of enforcing rights abroad. In addition, political and economic changes, including international conflicts (such as the ongoing conflict between Russia and Ukraine) and terrorist acts, throughout the world may interfere with our, our suppliers' and/or our customers' activities in particular locations and result in a material adverse effect on our business, financial condition, and operating results. Any of these risks could adversely affect our international operations, reduce our international sales or increase our operating costs, adversely affecting our business, operating results and financial condition and growth prospects.

We are subject to governmental export and import controls that could impair our ability to compete in international markets due to licensing requirements and subject us to liability if we are not in compliance with applicable laws.

Our products are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. Exports of our products must be made in compliance with these laws and regulations. If we violate these laws and regulations, we and certain of our employees, could be subject to substantial civil or criminal penalties, including the possible loss of export or import privileges, fines, which may be imposed on us and responsible employees or managers and, in extreme cases, the incarceration of responsible employees or managers. In addition, if our channel partners, agents, or consultants fail to obtain appropriate import, export or re-export licenses or authorizations, we may also be adversely affected through reputational harm and penalties. Obtaining the necessary authorizations, including any required license, for a particular sale may be time-consuming, is not guaranteed and may result in the delay or loss of sales opportunities. Changes in our products or changes in applicable export or import laws and regulations may also create delays in the introduction and sale of our products in international markets, prevent our end-customers with international operations from deploying our products or, in some cases, prevent the export or import of our products to certain countries, governments or persons altogether. Any change in export or import laws and regulations, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons or technologies targeted by such laws and regulations, could also result in decreased use of our products, or in our decreased ability to export or sell our products to existing or potential end-customers with international operations. Any decreased use of our products or limitation on our ability to export or sell our products would likely adversely affect our business, financial condition and operating results.

New regulations or standards or changes in existing regulations or standards in the United States or internationally related to our suppliers' products may result in unanticipated costs or liabilities, which could have a material adverse effect on our business, operating results, and future sales, and could place additional burdens on the operations of our business.

Our suppliers' products are subject to governmental regulations in many jurisdictions. To achieve and maintain market acceptance, our suppliers' products must continue to comply with these regulations and many industry standards. As these regulations and standards evolve, and if new regulations or standards are implemented, our suppliers may have to modify their products. The failure of their products to comply, or delays in compliance, with the existing and evolving industry regulations and standards could prevent or delay introduction of our products, which could harm our business. Supplier uncertainty regarding future policies may also affect demand for HPC products, including our products. Moreover, channel partners or customers may require us, or we may otherwise deem it necessary or advisable, to alter our products to address actual or anticipated changes in the regulatory environment. Our inability to alter our products to address these requirements and any regulatory changes may have a material adverse effect on our business, operating results and financial condition.

We could be adversely affected by violations of the U.S. Foreign Corrupt Practices Act and similar worldwide anti-bribery laws.

The U.S. Foreign Corrupt Practices Act and similar anti-bribery laws generally prohibit companies and their intermediaries from making improper payments to foreign government officials for the purpose of obtaining or retaining business. Practices in the local business communities of many countries outside the United States have a level of government corruption that is greater than that found in the developed world. Our policies mandate compliance with these anti-bribery laws and we have established policies and procedures designed to monitor compliance with these anti-bribery law requirements; however, we cannot assure that our policies and procedures will protect us from potential reckless or criminal acts committed by individual employees or agents. If we are found to be liable for anti-bribery law violations, we could suffer from criminal or civil penalties or other sanctions that could have a material adverse effect on our business.

Risks Related to Our Securities

The price of our common stock may be volatile, and you could lose all or part of your investment.

The trading price of our common stock may fluctuate substantially. The trading price of our common stock will depend on several factors, including those described in this "Risk Factors" section, many of which are beyond our control and may not be related to our operating performance. These fluctuations could cause you to lose all or part of your investment in our securities if you are unable to sell them at or above the price you paid. Factors that could cause fluctuations in the trading price of our common stock include, amongst other things:

- price and volume fluctuations in the overall stock market from time to time;
- volatility in the market prices and trading volumes of technology stocks;
- changes in operating performance and stock market valuations of other technology companies generally, or particularly, those companies in our industry;
- sales of shares of our common stock or other securities by us or our stockholders;
- failure of financial analysts to maintain coverage of us, changes in financial estimates by any analysts who follow the Company, or our failure to meet these estimates or the expectations of investors;
- the financial projections we may provide to the public, any changes in those projections or our failure to meet those projections;

- announcements by us or our competitors of new products or new or terminated significant contracts, commercial relationships or capital commitments;
- the public's reaction to our press releases, other public announcements and filings with the SEC;
- rumors and market speculation involving us or other companies in our industry;
- actual or anticipated changes in our operating results or fluctuations in our operating results;
- actual or anticipated developments in our business, our competitors' businesses, or the competitive landscape generally;
- litigation involving us, our industry or both, or investigations by regulators into our operations or those of our competitors;
- developments or disputes concerning our intellectual property or other proprietary rights;
- announced or completed acquisitions of businesses or technologies by us or our competitors;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- changes in accounting standards, policies, guidelines, interpretations or principles;
- any major change in our management;
- general economic conditions and slow or negative growth of our markets; and
- other events or factors, including those resulting from war, incidents of terrorism or responses to these events.

In addition, the stock market in general, and the market for technology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of the relevant companies. Broad market and industry factors, as well as general economic, political and market conditions, such as recessions or interest rate changes, may seriously affect the market price of our common stock, regardless of our actual operating performance.

In the past, following periods of volatility in the overall market and the market prices of particular companies' securities, securities class action litigation has often been instituted against these companies. Litigation of this type, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources. Any adverse determination in any such litigation or any amounts paid to settle any such actual or threatened litigation could require that we make significant payments.

Our directors and principal stockholders own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

Our directors, executive officers and significant stockholders have substantial control over the Company and could delay or prevent a change in corporate control. Our directors, executive officers, and holders of more than 5% of our common stock, together with their affiliates, beneficially own, in the aggregate, 33.4% of our outstanding common stock, based on the number of shares outstanding as of February 28, 2023. As a result, these stockholders, acting together, would have the ability to exert significant control over the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger, consolidation or sale of all or substantially all of our assets. In addition, these stockholders, acting together, would have the ability to exert significant control the management and affairs of the Company. Accordingly, this concentration of ownership might adversely affect the market price of our common stock by:

- delaying, deferring or preventing a change in control of the Company;
- impeding a merger, consolidation, takeover, or other business combination involving the Company; or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of the Company.

If securities or industry analysts issue an adverse opinion regarding our securities or do not publish research or reports about our Company, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that equity research analysts publish about us and our business. We have no control over such analysts or the content and opinions in their reports.

Securities analysts may elect not to provide research coverage of our Company and such lack of research coverage may adversely affect the market price of our common stock. The price of our common stock could also decline if one or more equity research analysts downgrade our common stock or if those analysts issue other unfavorable commentary or cease publishing reports about us or our business. If one or more equity research analysts cease coverage of our Company, we could lose visibility in the market, which in turn could cause our stock price to decline.

Substantial future equity issuances and/or sales of shares of our common stock could cause the market price of our common stock to decline.

The market price of shares of our common stock could decline as a result of substantial equity issuances and/or sales of our common stock, particularly sales by our directors, executive officers and significant stockholders, a large number of shares of our common stock becoming available for sale, or the perception in the market that holders of a large number of shares intend to sell their shares. As of February 28, 2023, we have 20,343,071 shares of our common stock outstanding. We may issue or sell a significant number of shares of our common stock or other securities to raise capital in the future or in connection with a strategic transaction, which would result in significant dilution to our current shareholders. Additionally, historically, a significant portion of the compensation that we pay to our executive officers, employees and directors has been in the form of equity awards. We believe that this structure incentivizes such individuals to both join and remain with the Company, and also serves to further the growth, development and financial success of the Company by providing a means by which such persons can personally benefit through the ownership of capital stock of the Company. However, the issuance of securities to our executive officers, employees and directors also results in dilution to our current shareholders, and substantial sales of such securities could cause the market price of our securities to decline and/or could depress the growth of the market price of our securities.

We have the right to designate and issue shares of preferred stock. If we were to designate and/or issue additional preferred stock, it is likely to have rights, preferences and privileges that may adversely affect the common stock.

We are authorized to issue 10,000,000 shares of blank-check preferred stock, with such rights, preferences and privileges as may be determined from time to time by our board of directors. Our board of directors is empowered, without stockholder approval, to issue preferred stock in one or more series, and to fix for any series the dividend rights, dissolution or liquidation preferences, redemption prices, conversion rights, voting rights, and other rights, preferences, and privileges for the preferred stock. Currently, we do not have any series of preferred stock designated or shares of preferred stock issued and outstanding.

The issuance of shares of preferred stock, depending on the rights, preferences, and privileges attributable to the preferred stock, could reduce the voting rights and powers of the common stock and the portion of our assets allocated for distribution to common stockholders in a liquidation event, and could also result in dilution in the book value per share of the common stock. The preferred stock could also be utilized, under certain circumstances, as a method for raising additional capital or discouraging, delaying or preventing a change in control of the Company, to the detriment of the investors in the common stock offered hereby. We cannot assure that we will not, under certain circumstances, issue shares of our preferred stock.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of the Company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our certificate of incorporation and amended and restated bylaws may have the effect of delaying or preventing a change of control or changes in our management. Some of these provisions:

- authorize our board of directors to issue, without further action by the stockholders, up to 10,000,000 shares of undesignated preferred stock and up to 50,000,000 shares of authorized common stock;
- require that any action to be taken by our stockholders be affected at a duly called annual or special meeting, and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, the chairman of the board of directors, the chief executive officer or the president;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;

- provide that our directors may be removed only for cause; and
- provide that vacancies on our board of directors may, except as otherwise required by law, be filled only by a majority of directors then in office, even if less than a quorum.

In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us. Furthermore, our certificate of incorporation specifies that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for most legal actions involving actions brought against us by stockholders. We believe this provision benefits us by providing increased consistency in the application of Delaware law by chancellors particularly experienced in resolving corporate disputes, efficient administration of cases on a more expedited schedule relative to other forums and protection against the burdens of multi-forum litigation. However, the provision may have the effect of discouraging lawsuits against our directors and officers. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that, in connection with any applicable action brought against us, a court could find the choice of forum provisions contained in our certificate of incorporation to be inapplicable or unenforceable in such action.

These anti-takeover provisions and other provisions in our certificate of incorporation and amended and restated bylaws make it more difficult for stockholders or potential acquirers to obtain control of our board of directors or initiate actions that are opposed by the then-current board of directors and could also delay or impede a merger, tender offer or proxy contest involving our Company. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing or cause us to take other corporate actions you desire. Any delay or prevention of a change of control transaction or changes in our board of directors could cause the market price of our common stock to decline.

Our inability to raise additional capital on acceptable terms in the future may limit our ability to develop and commercialize new solutions and technologies and expand our operations.

If our available cash balances and anticipated cash flow from operations are insufficient to satisfy our liquidity requirements, due to lower demand for our products as a result of other risks described in this "Risk Factors" section, we may seek to raise additional capital through equity offerings, debt financings, collaborations or licensing arrangements. We may also consider raising additional capital in the future to expand our business, pursue strategic investments, take advantage of financing opportunities, or other reasons.

Additional funding may not be available to us on acceptable terms, or at all. If we raise funds by issuing equity securities, dilution to our stockholders could result. Any equity securities issued also may provide for rights, preferences, or privileges senior to those of holders of our common stock. The terms of debt securities issued or borrowings could impose significant restrictions on our operations. The incurrence of indebtedness or the issuance of certain equity securities could result in increased fixed payment obligations and could also result in restrictive covenants, such as limitations on our ability to incur additional debt or issue additional equity, limitations on our ability to acquire or license intellectual property rights, and other operating restrictions that could adversely affect our ability to conduct our business. In addition, the issuance of additional equity securities by us, or the possibility of such issuance, may cause the market price of our common stock to decline. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or to grant licenses on terms that are not favorable to us. If we are unable to raise adequate funds, we may have to liquidate some or all of our assets, or delay or reduce the scope of our development programs. We also may have to reduce marketing, customer support or other resources devoted to our products or cease operations. Any of these actions could harm our business, operating results, and financial condition.

We have never paid, and do not expect to pay, any cash dividends to holders of our common stock for the foreseeable future.

We have never paid, and do not expect to pay, cash dividends to holders of our common stock at any time in the foreseeable future. Anyone considering investing in shares of our common stock should not rely on such investment to provide dividend income. Instead, we plan to retain any earnings to establish, maintain and expand our operations and product offerings. In addition, any future debt financing arrangement may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our stock. Accordingly, investors must rely on sales of their shares of common stock after price appreciation, which may never occur, as the only way to realize any return on their investment.

We are an "emerging growth company" and a "smaller reporting company," and the reduced public company reporting and disclosure requirements applicable to emerging growth companies and smaller reporting companies may make our common stock less attractive to investors.

We currently qualify as an "emerging growth company," as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may choose to take advantage of certain exemptions from various reporting requirements applicable to other public companies but not to emerging growth companies, which includes, among other things:

•being permitted to have only two years of audited financial statements and only two years of management's discussion and analysis of financial condition and results of operations disclosure;

•an exemption from the auditor attestation requirements under Section 404(b) of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act");

•not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board ("PCAOB") regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;

•reduced disclosure obligations regarding executive compensation, amongst other things, in our periodic reports and proxy statements; and

•exemption from the requirements of holding non-binding stockholder votes on executive compensation arrangements and stockholder approval of any golden parachute payments not previously approved.

We could be an emerging growth company until the last day of the fiscal year following the fifth anniversary after our initial public offering (December 31, 2023), or until the earliest of (i) the last day of the fiscal year in which we have annual gross revenue of $1.07 billion or more; (ii) the date on which we have, during the previous three year period, issued more than $1.07 billion in non-convertible debt; or (iii) the date on which we are deemed to be a large accelerated filer under the federal securities laws. We will qualify as a large-accelerated filer as of the first day of the first fiscal year after we have (i) more than $700 million in outstanding common equity held by our non-affiliates, and (ii) been public for at least 12 months. The value of our outstanding common equity will be measured each year on the last day of our second fiscal quarter.

In addition, we are currently a "smaller reporting company," as defined in the Exchange Act, and have elected to take advantage of certain of the scaled disclosures available to smaller reporting companies. To the extent that we continue to qualify as a "smaller reporting company" as such term is defined in Rule 12b-2 under the Exchange Act, after we cease to qualify as an emerging growth company, certain of the exemptions available to us as an "emerging growth company" may continue to be available to us as a "smaller reporting company," including exemption from compliance with the auditor attestation requirements pursuant to the Sarbanes-Oxley Act and reduced disclosure about our executive compensation arrangements, amongst other things. We will continue to be a "smaller reporting company" until we have more than $250 million in public float (based on our common stock) measured as of the last business day of our most recently completed second fiscal quarter or, in the event we have no public float (based on our common stock), annual revenues of more than $100 million during the most recently completed fiscal year.

As a result of the foregoing, the information we provide may be different than the information that is available with respect to other public companies. We cannot predict if investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

Not applicable.

ITEM 2. PROPERTIES.

Our corporate headquarters are in a leased space comprising of approximately 29,342 square feet in Escondido, California under a lease that expires in August 2024. We also lease a 3,208 square foot facility in Salt Lake City, Utah that expires in June 2023, that houses our Ion software development team. Additionally, we lease a 1,632 square foot facility located in Anaheim, California, with the lease expiring in June 2023. OSS Europe leases space comprising of 8,073 square feet on a month-to-month lease.

We believe our existing facilities and equipment are in good operating condition and are suitable for the conduct of our business.

ITEM 3. LEGAL PROCEEDINGS.

We are subject to litigation, claims, investigations, and audits arising from time to time in the ordinary course of our business. See footnote No. 12 "Commitments and Contingencies" in the accompanying consolidated financial statements.

ITEM 4. MINE SAFETY DISCLOSURES.

Not Applicable

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

Market Information

Our common stock, par value $0.0001, per share is publicly traded on The Nasdaq Capital Market under the symbol "OSS". Below is our quarterly information with respect to the high and low sale prices for our common stock for such time periods.

	High		Low	
First Quarter (through March 20, 2023)	$ 3.71	$	2.46	*

* On March 20, 2023, the closing price was $2.47 per share.

	2022		2021	
Year ended December 31, 2022 and 2021:	**High**	**Low**	**High**	**Low**
First Quarter	$ 5.19	$ 3.75	$ 9.50	$ 3.61
Second Quarter	$ 4.95	$ 3.80	$ 6.94	$ 4.27
Third Quarter	$ 4.19	$ 3.13	$ 6.66	$ 4.78
Fourth Quarter	$ 3.40	$ 2.69	$ 5.66	$ 4.40

Holders

As of February 28, 2023, there were 20,343,071, shares of our common stock outstanding held by approximately 60 holders of record of our common stock. This number was derived from our stockholder records and does not include beneficial holders of our common stock whose shares are held in "street name" with various dealers, clearing agencies, banks, brokers, and other fiduciaries.

Dividend Policy

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any cash dividends on our common stock in the foreseeable future. We may enter into credit agreements or other borrowing arrangements in the future that will restrict our ability to declare or pay cash dividends on our common stock. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

Equity Compensation Plan Information

See Part III, Item 12, "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" for information regarding securities authorized for issuance under equity compensation plans.

Unregistered Sales of Equity Securities

During the year ended December 31, 2022, there were no unregistered sales of our securities that were not reported in a Current Report on Form 8-K or our Quarterly Reports on Form 10-Q.

Issuer Repurchases of Equity Securities

None.

ITEM 6. [RESERVED].

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

You should read the following discussion and analysis of our financial condition and operating results together with our financial statements and related notes included elsewhere in this Annual Report. This discussion and analysis contain forward-looking statements based upon current beliefs, plans and expectations that involve risks, uncertainties, and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Risk Factors" or in other parts of this Annual Report.

Overview

One Stop Systems, Inc. ("OSS") designs, manufactures, and markets specialized high-performance compute and storage hardware, software, and systems, which are designed to target edge AI Transportable deployments. These specialized modules and systems consist of computers and storage products that incorporate the latest state-of-the art components with our embedded proprietary software. Such modules and systems allow our customers to offer high-end computing capabilities (often integrated within their equipment) to their target markets and applications. Edge computing is a form of computing that is done on site, near a particular data source or the user (rather than in the cloud), minimizing the need for data to be processed in a remote data center. The global increase in load on the cloud infrastructure and increase in AI applications, are the primary factors driving the growth of the edge computing market. We market our products to manufacturers of automated equipment used for medical, industrial, and military applications. Our customer applications often require connection to a wide array of data sources and sensors, ultra-fast processing power, and the ability to quickly access and store large and ever-growing data sets at their physical location (rather than in the cloud). This equipment requires datacenter class performance optimized for deployment at the edge in challenging environments. Many of these edge applications have unique requirements, including special and compact form factors ruggedized for harsh conditions, which cannot be accommodated by traditional controlled air-conditioned data centers. We believe that we are uniquely positioned as a specialized provider to address the needs of this market, providing custom servers, data acquisition platforms, compute accelerators, solid-state storage arrays, system I/O expansion systems, as well as edge optimized industrial and panel PCs, tablets, and handheld compute devices. Our systems also offer industry leading capabilities that occupy less physical space and require less power consumption. We deliver this high-end technology to our customers through the sale of equipment and embedded software.

One Stop Systems, Inc. was originally incorporated as a California corporation in 1999, after initially being formed as a California limited liability company in 1998. On December 14, 2017, the Company was reincorporated as a Delaware corporation in connection with its initial public offering.

During the year ended December 31, 2015, the Company formed a wholly owned subsidiary in Germany, OSS GmbH. Then, in July 2016, the Company acquired Magma and its operations.

On August 31, 2018, the Company acquired CDI, which was located in Irvine, California. CDI specialized in the design and manufacture of custom high-performance computing systems for airborne in-flight entertainment, flight safety equipment, and networking systems. CDI's business was fully integrated into the core operations of OSS as of June 1, 2020.

On October 31, 2018, OSS GmbH acquired 100% of the outstanding stock of Bressner Technology GmbH, a Germany limited liability company located near Munich, Germany ("OSS Europe"). OSS Europe designs and manufactures standard and customized servers, panel PCs, and PCIe expansion systems. OSS Europe also provides manufacturing, test, sales, and marketing services for customers throughout the EMEA.

Recent Developments

In the second quarter of 2022, we formed a new strategic advisory board to aid in the acceleration of our pursuit of the AI Transportables market, and the military sector in particular. The advisory board is comprised of retired high-ranking military officials and corporate executives with decades of experience in technology, high performance computing and M&A for the defense, oil & gas, AI and autonomous vehicle industry verticals. Members of the advisory board provide input on product and market strategy, as well as help us navigate government bureaucracy and identify/introduce us to key decision makers, all with the goal of accelerating our success through their contacts, knowledge and experience. Please see the section of this Annual Report entitled "Advisory Board Members," below, for information regarding each of the members of our advisory board.

Furthermore, in the first quarter of 2023, we implemented certain internal organizational changes to align our US-based operations with, and to further support and accelerate, our strategy to focus on the AI Transportables industry, and our military business in particular. In furtherance of this strategy and our goals, we have taken various steps to strengthen our management team with individuals who have deep experience and high-level contacts in the defense sector. In connection with this transition, on February 9, 2023, we announced that David Raun, the Company's chief executive officer, will be stepping down, effective upon the appointment of his successor. Mr. Raun will continue to serve as a member of the Company's board of directors. Additionally, in connection with this transition, we also (i) appointed James Ison, our chief marketing and sales officer, as our chief product officer, (ii) initiated a search for a vice president of sales, (iii) implemented a reduction in force, consisting of 12 employees, in those areas of our business that we are transitioning our focus away from; and (iv) made certain other internal structural changes.

We have not yet identified a candidate to fill the roles of chief executive officer or a vice president of sales; however, we have retained an internationally recognized search firm to aid in this effort. Additionally, in February 2023, our board of directors constituted a new committee of the board, the Strategic Transition Committee, to assist in the identification, transition and retention of a successor chief executive officer, including to work with the engaged search firm to accomplish the foregoing, to provide support to our management team throughout the transition, and to perform other duties as may be necessary or desirable from time to time in connection with the reorganization of the Company. Members of the Strategic Transition Committee consist of Jack Harrison (chair of the committee), Gioia Messinger and Kenneth Potashner. As compensation for the services that they are expected to perform as members of the Strategic Transition Committee (i) Mr. Harrison and Ms. Messinger shall be entitled to receive $2,000 per month in cash, commencing January 1, 2023 and continuing for so long as the Strategic Transition Committee remains in effect, which cash payments shall be paid to each of the relevant members in one lump sum at or about such time that the Strategic Transition Committee is disbanded, and (ii) Mr. Potashner shall be entitled to receive (A) 3,333 shares of Company common stock per month, commencing November 1, 2022 and continuing for so long as the Strategic Transition Committee remains in effect, which shares shall be issued to Mr. Potashner in one grant at or about such time that the Strategic Transition Committee is disbanded, and (B) a one-time cash payment equal to 30% of the total value of the shares issued to Mr. Potashner to cover taxes payable in connection with the issuance of such shares.

The negative impact of the COVID-19 pandemic and the impact on the global economy and capital markets resulting from the geopolitical instability caused in part by the ongoing military conflict between Russia and Ukraine, including inflation and Federal Reserve interest rate increases, have contributed to global supply chain issues and economic uncertainty, which has negatively affected our operations. Additionally, the general consensus among economists continues to suggest that we should expect a higher recession risk to continue for the foreseeable future, which could result in further economic uncertainty and volatility in the capital markets in the near term and could negatively affect our operations.

Additionally, in March 2023, Silicon Valley Bank and Signature Bank were closed and taken over by the FDIC, which created significant market disruption and uncertainty for those who bank with those institutions, and which raised significant concern regarding the stability of the banking system in the United States, and in particular with respect to regional banks. If other banks and financial institutions enter receivership or become insolvent in the future in response to financial conditions affecting the banking system and financial markets, our ability to access our cash and cash equivalents may be threatened and such events could have a material adverse effect on our business and financial condition.

With respect to our media and entertainment business, we are seeing an acceleration in our customer's investment in cloud technology and a drive towards less intelligent compute capability at the edge to reduce the costs of their componentry. This is particularly true of their virtual products, which do not require the same level of ruggedization as this system is not typically operated in harsh environments and for which software is being developed to eventually provide a real-time cloud solution. As a result, we expect that our customer will transition to a lower cost, commodity type equipment solution. We anticipate that we will begin to experience a decrease in the demand for our high-compute, ruggedized media and entertainment focused equipment and our expertise in this area in the first half of 2023.

Currently, we are experiencing increased pricing, longer lead-times, unavailability of product and limited supplies, protracted delivery dates, changes in minimum order quantities to secure product, and/or shortages of certain parts and supplies that are necessary components for the products and services we offer to our customers. As a result, the Company is carrying increased inventory balances to ensure availability of necessary products and to secure pricing.

These global issues and concerns regarding general economic decline or recession are also impacting some of our customers, who are experiencing downturns or uncertainty in their own business operations and revenue, and as a result, these customers may need to decrease or delay their technology spending, request pricing concessions or payment extensions, or seek to renegotiate their contracts.

As a result of these global issues, as well as other factors discussed in this Annual Report, it has been difficult to accurately forecast our revenues or financial results, especially given the near and long-term impacts of the pandemic, geopolitical issues, inflation, the Federal Reserve interest rate increases and the potential for a recession. In addition, while the potential impact and duration of these issues on the economy and our business may be difficult to assess or predict, these world events have resulted in, and may continue to result in, significant disruption of global financial markets, and may reduce our ability to access additional capital, which could negatively affect our liquidity in the future. Our results of operations could be materially below our forecasts as well, which could adversely affect our results of operations, disappoint analysts and investors, or cause our stock price to decline.

Furthermore, a decrease in orders in a given period, including in connection with our media and entertainment customer's transition to the cloud, could negatively affect our revenues in future periods. These global issues and events may also have the effect of heightening many risks associated with our customers and supply chain. We may take further actions that alter our operations as may be required by federal, state, or local authorities from time to time, or which we determine are in our best interests. In addition, we may decide to postpone or abandon planned investments in our business in response to changes in our business, which may impact our ability to attract and retain customers and our rate of innovation, either of which could harm our business.

Management's plans with respect to the above are to continue their efforts towards responding to the changing economic landscape, to continue to control costs, conserve cash, strengthen margins through the introduction of new product lines focusing on the autonomous truck diving and artificial intelligence compute capabilities for military and industrial applications, and improve company-wide execution.

Components of Results of Operations

Revenue

The Company recognizes revenue under accounting standard ASC 606. Revenue is primarily generated from the sale of computer hardware and engineering services, and, to a minimal extent, revenue is also generated from the sale of software and sales of software maintenance and support contracts. The Company's performance obligations are satisfied over time as work is performed or at a specific point in time. The majority of the Company's revenue is recognized at that point in time when products ship and control is deemed to be transferred to the customer. The Company determines revenue recognition through the following steps: (1) identification of the contract with a customer; (2) identification of the performance obligations in the contract; (3) determination of the transaction price; (4) allocation of the transaction price to the performance obligations in the contract; and (5) recognition of revenue when, or as, a performance obligation is satisfied.

Cost of revenue

Cost of revenue primarily consists of costs of materials, costs paid to third-party contract manufacturers (which may include the costs of components), and personnel costs associated with manufacturing and support operations. Personnel costs consist of wages, bonuses, benefits, stock-based compensation expenses. Cost of revenue also includes freight, allocated overhead costs and inventory write-offs and changes to our inventory and warranty reserves. Allocated overhead costs consist of certain facilities and utility costs. We expect cost of revenue to increase in absolute dollars with an improvement in margin, as product revenue increases.

Operating expenses

Our operating expenses consist of general and administrative, sales and marketing and research and development expenses. Salaries and personnel-related costs, benefits, and stock-based compensation expense, are the most significant components of each category of operating expenses. Operating expenses also include allocated overhead costs for facilities and utility costs.

General and Administrative - General and administrative expense consists primarily of employee compensation and related expenses for administrative functions including finance, legal, human resources, and fees for third-party professional services, as well as allocated overhead. We expect our general and administrative expense to increase in absolute dollars as we continue to invest in growing the business.

Marketing and Selling – Marketing and Selling expense consists primarily of employee compensation and related expenses, sales commissions, marketing programs, travel, and entertainment expenses as well as allocated overhead.

Marketing programs consist of advertising, tradeshows, events, corporate communications, and brand-building activities. We expect marketing and selling expenses to increase in absolute dollars as we expand our sales force, increase marketing resources, and further develop sales channels.

Research and Development - Research and development expense consists primarily of employee compensation and related expenses, prototype expenses, depreciation associated with assets acquired for research and development, third-party engineering, and contractor support costs, as well as allocated overhead. We expect our research and development expenses to increase in absolute dollars as we continue to invest in new and existing products.

Other Income (Expense), net

Other income consists of miscellaneous income and income received for activities outside of our core business. Other expense includes expenses for activities outside of our core business.

Provision for Income Taxes

Provision for income taxes consists of estimated income taxes due to the United States and German governments as well as state tax authorities in jurisdictions in which we conduct business, along with the change in our deferred income tax assets and liabilities.

Results of Operations

The following tables set forth our results of operations for the years ended December 31, 2022 and 2021, respectively, presented in dollars and as a percentage of revenue.

	For the Year Ended December 31, 2022	2021
Revenue	$ 72,421,345	$ 61,982,104
Cost of revenue	52,023,736	42,342,815
Gross profit	20,397,609	19,639,289
Operating expenses:		
General and administrative	7,279,401	7,658,418
Marketing and selling	6,806,306	6,201,228
Research and development	4,743,574	4,032,616
Total operating expenses	18,829,281	17,892,262
Income from operations	1,568,328	1,747,027
Other income (expense):		
Interest income	237,751	244,382
Interest expense	(162,391)	(527,139)
Gain on forgiveness of Paycheck Protection Program (PPP) loan and interest	-	1,514,354
Other income (expense), net	550,854	(40,176)
Total other income (expense), net	626,214	1,191,421
Income before income taxes	2,194,542	2,938,448
Provision for income taxes	4,423,597	605,675
Net (loss) income	$ (2,229,055)	$ 2,332,773

	For the Year Ended December 31, 2022	2021
Revenue	100.0%	100.0%
Cost of revenue	71.8%	68.3%
Gross profit	28.2%	31.7%
Operating expenses:		
General and administrative	10.1%	12.4%
Marketing and selling	9.4%	10.0%
Research and development	6.5%	6.5%
Total operating expenses	26.0%	28.9%
Income from operations	2.2%	2.8%
Other income (expense):		
Interest income	0.3%	0.4%
Interest expense	-0.2%	-0.9%
Gain on forgiveness of Paycheck Protection Program (PPP) loan and interest	0.0%	2.4%
Other income (expense), net	0.8%	-0.1%
Total other income (expense), net	0.9%	1.9%
Income before income taxes	3.0%	4.7%
Provision for income taxes	6.1%	1.0%
Net (loss) income	-3.1%	3.8%

Comparison of the Years Ended December 31, 2022 and 2021:

	For The Year Ended December 31, 2022				For The Year Ended December 31, 2021			
Entity:	Revenue	Cost of Revenue	Gross Profit	Gross Margin %	Revenue	Cost of Revenue	Gross Profit	Gross Margin %
OSS	$ 43,286,715	$ (29,142,852)	$ 14,143,863	32.7%	$ 38,492,004	$ (24,272,292)	$ 14,219,712	36.9%
OSS Europe	29,134,630	(22,880,884)	6,253,746	21.5%	23,490,100	(18,070,523)	5,419,577	23.1%
	$ 72,421,345	$ (52,023,736)	$ 20,397,609	28.2%	$ 61,982,104	$ (42,342,815)	$ 19,639,289	31.7%

Revenue

For the year ended December 31, 2022, our total revenue increased $10,439,241, or 16.8%, as compared to the same period in 2021. OSS saw an increase in revenue of $4,794,711, or 12.5%, as compared to the prior year in 2021. The majority of this increase is primarily attributable to an increase in orders and shipments of our AI Transportable products into the autonomous trucking industry and to our media and entertainment customer. OSS Europe experienced an increase of $5,644,530, or 24.0%, as compared to the prior year in 2021. This increase is primarily attributable to general economic improvements in Europe resulting from the diminishing impact of the COVID-19 pandemic in the business environment and procuring large, one-time orders.

Cost of revenue and gross profit

Cost of revenue increased $9,680,921, or 22.9%, for the year ended December 31, 2022, as compared to the prior year in 2021. OSS saw an increase in cost of revenue of $4,870,560, or 20.1%, as compared to the prior year period in 2021. This increase in cost of revenue is mainly attributable to an increase in our sales of AI Transportable products into the autonomous trucking industry and to our media and entertainment customer (disguise) and additional allowance for inventory obsolescence related primarily to disguise. OSS Europe's cost of revenue increased $4,810,361, or 26.6%, as compared to the prior year in 2021, due to a general economic improvement in Europe resulting from the diminishing impact of the COVID-19 pandemic in the business environment and procuring large, one-time orders.

The overall gross margin percentage decreased from 31.7% in the prior year to 28.2% in the current year. OSS' gross margin percentage for the year ended December 31, 2022, was 32.7%, a decrease of 4.2 percentage points as compared to the prior year period in 2021 of 36.9%, due to the predominance of lower margin product sales to our media and entertainment customer, an overall increase in material costs for the majority of our products, and additional allowance for inventory obsolescence. OSS Europe contributed gross margin at a rate of 21.5%, as compared to the same prior year period in 2021 of 23.1%, a decrease of 1.6 percentage points, which was attributable to increased costs for materials and transportation costs.

Operating expenses

General and administrative expense

General and administrative expense decreased $379,017, or 4.9%, for the year ended December 31, 2022, as compared to the same prior year period in 2021. OSS experienced a decrease of $127,251, or 2.3%. OSS Europe had a decrease of $251,766, or 12.3%. The decrease in general and administrative expense is primarily attributable to reductions in amortization and legal expenses. Overall, total general and administrative expense decreased as a percentage of revenue to 10.1% for the year ended December 31, 2022, as compared to 12.4% during the same period in 2021.

Marketing and selling expense

Marketing and selling expense increased $605,078, or 9.8%, for the year ended December 31, 2022, as compared to the same prior year period in 2021. OSS had an increase of $441,302, or 8.9%, which was mainly attributable to a return to a more normalized business environment, which included additional costs for tradeshows, advertising, travel and personnel. OSS Europe had an increase of $163,776, or 13.0%, primarily resulting from the addition of new marketing personnel and sales collateral material. Generally, both OSS and OSS Europe experienced additional marketing expenses, as markets have reopened as a result of the reduction in restrictions that were imposed during the height of the COVID-19 pandemic. Overall, total marketing and selling expense decreased as a percentage of revenue to 9.4% during the year ended December 31, 2022, as compared to 10.0% during the same period in 2021.

Research and development expense

Research and development expense increased $710,958, or 17.6%, for the year ended December 31, 2022, as compared to the same prior year period in 2021. OSS saw an increase of $686,757, or 19.0%. The increase was largely driven by engineering resources being deployed for the development of new products for the AI Transportable industry and development of PCIe gen 5.0 technology. OSS Europe experienced a modest increase of $24,202, or 5.9%. This increase was attributable to increased testing of product to support the increase in revenue. Overall, total research and development expense as a percentage of revenue was the same for both years at 6.5%.

Interest income

Interest income decreased $6,631 for the year ended December 31, 2022, as compared to the same prior year period in 2021. The decrease is attributable to reduced investment balances and return on qualified short-term investments that meet company requirements.

Interest expense

Interest expense decreased $364,748 for the year ended December 31, 2022, as compared to the same period in 2021 as a result of the April 2021 maturity and repayment in full of certain outstanding promissory notes and related party notes payable. The interest and the professional fees incurred on securing debt were amortized on an effective interest rate basis to interest expense.

Other income (expense), net

Other income (expense), for the year ended December 31, 2022, resulted in net other income of $550,854, as compared to net other expense of $40,176 in the same prior year period in 2021, for a net change of $591,030. The most significant contributions to the year-over-year change include the forgiveness of the principal and interest in the amount of $1,514,354 of the Company's Paycheck Protection Program ("PPP") loan in 2021, the sale of a URL for Magma.com in 2022 for $125,000, and $500,320 for reversal of a settlement accrual for previous contract disputes.

Provision for income taxes

We have recorded an income tax provision of $4,423,597 and $605,675, respectively, for the years ended December 31, 2022 and 2021. The effective tax rate for the years ended December 31, 2022 and 2021 differed from the statutory rate mainly due to permanent non-deductible goodwill amortization for OSS Europe, deductions related to expenses of OSS stock options, research and development credits, forgiveness of the PPP loan, and changes in reserves for uncertain tax positions, as well as projecting federal, foreign and state tax liabilities for the year. Additionally, during 2022 the Company recorded a valuation allowance against its net deferred tax assets due to an assessment of the potential realization of such asset. Under the Tax Cuts and Jobs Act of 2017, research and development costs are no longer fully deductible and are required to be capitalized and amortized for U.S. tax purposes effective January 1, 2022. The mandatory capitalization requirement increases our deferred tax assets and may have an impact on payment of tax liabilities. The effective tax rate for the year ended December 31, 2022, is 201.4%, as compared to 20.6% in the prior year 2021 due to the effect of the valuation for deferred tax assets.

Liquidity and capital resources

On March 3, 2021, we sold and issued 1,497,006 shares of Company common stock to an accredited investor pursuant to a Securities Purchase Agreement through a registered direct offering, resulting in net proceeds of $9,188,673 to us. On April 1, 2022, we repaid in full the outstanding balance and accrued interest of those Senior Secured Convertible Promissory Notes that were issued by the Company to an institutional investor through a registered direct offering in April of 2020.

Historically, our primary sources of liquidity have been provided by public and private offerings of our securities and revenues generated from our business operations. As of December 31, 2022, we had total cash and cash equivalents of $3,112,196, with short-term investments of $10,123,535, and total working capital of $34,744,880. Cash and cash equivalents held by OSS Europe totaled US$336,359 on December 31, 2022. OSS Europe's debt covenants do not permit the use of those funds by its parent company.

During the year ended December 31, 2022, we had income from operations of $1,568,328, with cash used in operating activities of $7,812,542. During the year ended December 31, 2021, we had income from operations of $1,747,027, with cash generated by operating activities of $5,622,596.

Our sources of liquidity and cash flows are used to fund ongoing operations, fund research and development projects for new products technologies and provide ongoing support services for our customers. Over the next year, we anticipate that we will use our liquidity and cash flows from our operations to fund our growth. In addition, as part of our business strategy, we occasionally evaluate potential acquisitions of businesses, products and technologies. Accordingly, a portion of our available cash may be used at any time for the acquisition of complementary products or businesses. Such potential transactions may require substantial capital resources, which may require us to seek additional debt or equity financing. We cannot assure you that we will be able to successfully identify suitable acquisition candidates, complete acquisitions, successfully integrate acquired businesses into our current operations, or expand into new markets. Furthermore, we cannot provide assurances that additional financing will be available to us in any required time frame and on commercially reasonable terms, if at all.

During the fourth quarter of 2022, the general consensus among economists continued to suggest that we should expect a higher recession risk to continue over the next year, which could result in further economic uncertainty and volatility in the capital markets in the near term and could negatively affect our operations. We intend to continue to monitor the effects of inflation, global supply chain shortages and the economic conditions, and, if appropriate, we may alter our plans to address such concerns as they may arise.

Management's plans are to continue their efforts towards responding to the changing economic landscape, including inflation, foreign currency exchange rates, a potential recession, increases in the Federal Reserve interest rate, supply chain constraints and international conflicts, by continuing to control hiring and operating costs, conserve cash, focus on improving margin.

While management expects these actions and continued diligence towards cost growth and containment will result in a decreased rate of growth in costs as compared to revenue growth, our results of operations for the year ended December 31, 2022 improved partially as a result of such actions, management is also committed to conserving cash and securing debt and/or equity financing, as required, for liquidity to meet our cash requirements through at least a period of the next twelve months.

In April 2022, the Company obtained a domestic revolving line of credit of $2,000,000 from its bank, which renews on an annual basis at the current prime rate. To access this line of credit the Company must maintain cash and investments balances at a minimum of $4,000,000. Although the Company has not drawn down on the line of credit to date, it may choose to do so in the future.

As a result of management's implementation of our cost reduction plans, our potential sources of liquidity and management's most recent cash flow forecasts, management believes that we have sufficient liquidity to satisfy our anticipated working capital requirements for our ongoing operations and obligations for at least the next twelve months. However, there can be no assurance that management's cost reduction efforts will be effective or the forecasted cash flows will be achieved. Furthermore, we will continue to evaluate our capital expenditure needs based upon various factors, including but not limited to, our sales from operations, growth rate, the timing and extent of spending to support development efforts, the expansion of our sales and marketing efforts, the timing of new product introductions, and the continuing market acceptance of our products and services.

If cash generated from operations is insufficient to satisfy our capital requirements, we may borrow up to $2,000,000 from our revolving line of credit with our bank (subject to satisfaction of certain borrowing conditions), may have to sell additional equity or debt securities, or may obtain expanded credit facilities to fund our operating expenses, pay our obligations, diversify our geographical reach, and grow the Company. In the event such financing is needed in the future, there can be no assurance that such financing will be available to us, or, if available, that it will be in amounts and on terms acceptable to us. If we cannot raise additional funds when we need or want them, our operations and prospects could be negatively affected. However, if cash flows from operations become insufficient to continue operations at the current level, and if no additional financing were obtained, then management would consider restructuring the Company in a way to preserve its business while maintaining expenses within operating cash flows.

The following table summarizes our cash flows for the years ended December 31, 2022 and 2021:

	For the Year Ended December 31,	
Cash flows:	**2022**	**2021**
Net cash (used in) provided by operating activities	$ (7,806,025)	$ 5,622,596
Net cash provided by (used in) investing activities	$ 3,908,323	$ (15,110,625)
Net cash provided by financing activities	$ 1,946,553	$ 8,430,712

Operating Activities

During the year ended December 31, 2022, we used $7,806,025 in cash for operating activities, a difference of $13,428,621 when compared to the cash provided by operating activities of $5,622,596 during the 2021 year. This significant decrease in operating cash flow is mainly attributable to significant increases in working capital requirements for accounts receivable and inventories.

The change in cash used in operating activities during the year ended December 31, 2022, as compared to the cash provided by operating activities during the 2021 year, is primarily a result of a reduction in profitability from net income in 2021 of $2,332,773, which included the PPP loan and interest forgiveness of $1,514,354, to a net loss of $2,229,055 in the current year, a reduction of $4,561,828. Net favorable adjustments in the current period for non-cash items amounted to $5,272,731, which was comprised of $6,077,378 of favorable non-cash items, offset by $804,647 of negative non-cash items that did not affect operating cash flow. Additionally, there was a net increase in the use of operating cash flow for working capital items of $14,139,524.

Net working capital use requirements for the year ended December 31, 2022, were $13,317,430, as compared to the prior year period net sources of working capital of $822,094, an increase in the use of working capital of $14,139,524. The source of working capital of $1,431,046 was attributable to changes in accounts payable for the comparable period, which was then offset by uses of working capital of $15,570,570 being applied to changes in accounts receivables, increased inventory levels due to supply chain constraints, prepaid expenses and other current assets, and accrued expenses and other liabilities.

Our ability to generate cash from operations in future periods will depend in large part on our profitability, the rate and timing of collections of our accounts receivable, our inventory turns and our ability to manage other areas of working capital, including accounts payable and accrued expenses.

Investing Activities

During the year ended December 31, 2022, the Company generated cash of $3,908,323 in investing activities, as compared to $15,110,625 used during the prior year period in 2021, a net change of $19,018,948. The source of investing funds was attributable to the redemption of short-term investments and the sale of the Magma.com URL in 2022. Additionally, the Company continues to enhance the capabilities of its ERP system, and purchases test equipment for the engineering department. We do not anticipate any significant investments not normally anticipated in the ordinary course of business in the near term.

Financing Activities

Given the current economic, financial, and geopolitical instability, the Company believes it is imperative to maintain opportunities for additional financial resources to ensure financial stability during trying economic times. During the year ended December 31, 2022, the Company generated $1,946,553 in cash, with the majority coming from borrowing activities for OSS Europe for working capital to finance inventory purchases, as compared to the cash provided by financing activities of $8,430,712 during the year ended December 31, 2021. The main differences between the comparative periods are new borrowings from OSS Europe, for inventories, and the proceeds received in the prior year from a registered direct offering for gross proceeds of $10,000,000 that was completed in March 2021.

Contractual obligations and commitments

The following table sets forth our non-cancellable contractual obligations as of December 31, 2022.

Contractual Obligations:	Total	Less than 1 year	1-3 years	3-5 years	More than 5 Years
Notes payable	$ 3,361,741	$ 2,952,447	$ 409,294	$ -	$ -
Operating leases	933,837	536,588	397,249	-	-
Total	$ 4,295,578	$ 3,489,035	$ 806,543	$ -	$ -

We have made certain indemnities, under which we may be required to make payments to an indemnified party, in relation to certain transactions. We indemnify our directors, officers, employees, and agents to the maximum extent permitted under the laws of the State of Delaware. In connection with our facilities leases, we indemnify our lessors for certain claims arising from the use of our facilities. The duration of the indemnities varies, and in many cases is indefinite. These indemnities do not provide for any limitation of the maximum potential future payments we could be obligated to make. Historically, we have not been obligated to make any payments for these obligations and no liabilities have been recorded for these indemnities.

Known trends or uncertainties

Although we have not seen any significant reduction in revenues to date due to consolidations, we have seen some consolidation in our industry during economic downturns. These consolidations have not had a negative effect on our total sales; however, should consolidations and downsizing in the industry continue to occur, those events could adversely impact our revenues and earnings going forward.

As discussed in this Annual Report on Form 10-K, the world has been affected due to the COVID-19 pandemic, the ongoing conflict between Russia and Ukraine and economic uncertainty, amongst other things. Inflation has risen, Federal Reserve interest rates have increased recently, and the general consensus among economists suggests that we should continue to expect a higher recession risk to continue over the next year. These factors, amongst other things, could result in further economic uncertainty and volatility in the capital markets in the near term, and could negatively affect our operations.

Additionally, in March 2023, Silicon Valley Bank and Signature Bank were closed and taken over by the FDIC, which created significant market disruption and uncertainty for those who bank with those institutions, and which raised significant concern regarding the stability of the banking system in the United States, and in particular with respect to regional banks. If other banks and financial institutions enter receivership or become insolvent in the future in response to financial conditions affecting the banking system and financial markets, our ability to access our cash and cash equivalents may be threatened and such events could have a material adverse effect on our business and financial condition.

With respect to our media and entertainment business, we are seeing an acceleration in our customer's investment in cloud technology and a drive towards less intelligent compute capability at the edge to reduce the costs of their componentry. This is particularly true of their virtual products, which do not require the same level of ruggedization as this system is not typically operated in harsh environments and for which software is being developed to eventually provide a real-time cloud solution. As a result, we expect that our customer will transition to a lower cost, commodity type equipment solution. We anticipate that we will begin to experience a decrease in the demand for our high-compute, ruggedized media and entertainment focused equipment and our expertise in this area in the first half of 2023.

We believe that the need for improved productivity in the research and development activities directed toward developing new products and/or software will continue to result in increasing adoption of high-performance computers and interconnect technologies such as those we produce. New product and/or software developments in the specialized compute-business segment could result in increased revenues and earnings if they are accepted by our markets; however, there can be no assurances that new products and/or software will result in significant improvements to revenues or earnings. For competitive reasons, we do not disclose all of our new product development activities.

In the first quarter of 2023, we implemented certain internal organizational changes to align our US-based operations with, and to further support and accelerate, our strategy to focus on the AI Transportables industry, and our military business in particular. In furtherance of this strategy and our goals, on February 9, 2023, we announced that David Raun, the Company's chief executive officer, will be stepping down, effective upon the appointment of his successor. Mr. Raun will continue to serve as a member of the Company's board of directors.

Also, the potential for growth in new markets is uncertain. We will continue to explore these opportunities until such time as we either generate sales or determine that resources would be more efficiently used elsewhere.

Inflation

We experienced some affects due to inflation during the most recent period, including increased product pricing due to semiconductor product shortages, increased transportation costs due to increases in the cost of energy and general price increases due to inflation in the economy. Although the Company attempts to pass on increases in raw material, labor, energy and fuel-related costs to our customers, the Company's ability to do so is dependent upon the rate and magnitude of any increase, competitive pressures and market conditions for the Company's products. There have been in the past, and may be in the future, periods of time during which increases in these costs cannot be fully recovered. These increasing costs are being aggressively managed by the Company and actions are being taken to minimize the impact to the Company, particularly in the purchase of inventories to minimizing price increases. Inflation affects the Company's manufacturing costs, distribution costs and operating expenses.

Off balance sheet arrangements

Other than lease commitments incurred in the normal course of business and certain indemnification provisions, we do not have any off-balance sheet financing arrangements or liabilities, guarantee contracts, retained or contingent interests in transferred assets, or any obligation arising out of a material variable interest in an unconsolidated entity.

We do not have any majority-owned subsidiaries that are not consolidated in the financial statements. Additionally, we do not have an interest in, or relationships with, any special purpose entities.

Stockholder transactions

See Note 10 to the accompanying financial statements for a discussion regarding our stockholder transactions for the relevant periods.

Critical accounting policies and estimates

In preparing our consolidated financial statements in conformity with U.S. generally accepted accounting principles, management must make a variety of decisions which impact the reported amounts and the related disclosures. These decisions include the selection of the appropriate accounting principles to be applied and the assumptions on which to base accounting estimates. In making these decisions, management applies its judgment based on its understanding and analysis of the relevant circumstances and our historical experience.

Our accounting policies and estimates that are most critical to the presentation of our results of operations and financial condition, and which require the greatest use of judgments and estimates by management, are designated as our critical accounting policies. See further discussion of our critical accounting policies under Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," in our Annual Report. We periodically re-evaluate and adjust our critical accounting policies as circumstances change.

Revenue Recognition

The Company recognizes revenue in accordance with ASC 606, Revenue from Contracts with Customers. The Company’s performance obligations are satisfied over time as work is performed or at a point in time. The majority of the Company’s revenue is recognized at a point in time when products ship and control is transferred to the customer. The Company determines revenue recognition through the following steps: (i) identification of the contract with a customer; (ii) identification of the performance obligations in the contract; (iii) determination of the transaction price; (iv) allocation of the transaction price to the performance obligations in the contract; and (v) recognition of revenue when, or as, a performance obligation is satisfied.

The Company’s contracts are executed through a combination of written agreements along with purchase orders with all customers including certain general terms and conditions. Generally, purchase orders entail products, quantities and prices, which define the performance obligations of each party and are approved and accepted by the Company. The Company’s contracts with customers do not include extended payment terms. Payment terms vary by contract type and type of customer and generally range from 30 to 60 days from invoice. Additionally, taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction, that are collected by the Company from a customer and deposited with the relevant government authority, are excluded from revenue.

The transaction price is determined based on the consideration to which the Company will be entitled in exchange for transferring goods or services to the customer adjusted for estimated variable consideration, if any. Variable consideration may include discounts, rights of return, refunds, and other similar obligations. The Company allocates the transaction price to each distinct product and service based on its relative standalone selling price. The standalone selling price for products primarily involves the cost to produce the deliverable plus the anticipated margin and for services is estimated based on the Company’s approved list price.

In the normal course of business, the Company does not accept product returns unless the items are defective as manufactured. The Company establishes provisions for estimated returns and warranties. In addition, the Company does not typically provide customers with the right to a refund and does not transact for noncash consideration.

Customer agreements include one vendor managed inventory program. The Company recognizes revenue under this arrangement when all of the following criteria are met: (i) the goods have been identified separately as belonging to the customer; (ii) the goods are ready for physical shipment to the customer; (iii) the Company does not have the ability to direct the goods to another customer; and (iv) the arrangement was requested by the customer and that the customer has sufficiently explained a substantial business purpose for the arrangement. Management also considers whether the customer's custodial risks are insured and whether modifications to the Company's normal billing and credit terms were required.

Revenues on certain fixed-price contracts where we provide engineering services, prototypes and completed products are recognized based upon percentage of completion or based upon milestones delivered that are provided during the period and compared to milestone goals to be provided over the entire contract. These services require that we perform significant, extensive, and complex design, development, modification or implementation of our customers’ systems. Performance will often extend over long periods of time, and our right to receive future payment depends on our future performance in accordance with the agreement.

The percentage-of-completion methodology involves recognizing probable and reasonably estimable revenue using the percentage of services completed, on a current cumulative cost to estimated total cost basis, using a reasonably consistent profit margin over the performance period. Due to the long-term nature of these projects, developing the estimates of costs often requires significant judgment. Factors that must be considered in estimating the progress of work completed and ultimate cost of the projects include, but are not limited to, the availability of labor and labor productivity, the nature and complexity of the work to be performed and the impact of delayed performance. If changes occur in delivery, productivity or other factors used in developing the estimates of costs or revenues, we revise our cost and revenue estimates, which may result in increases or decreases in revenues and costs, and such revisions are reflected in earnings in the period in which the revision becomes known.

The Company recognizes contract assets or unbilled receivables related to revenue recognized for services completed but not yet invoiced to the clients. Unbilled receivables are recorded as accounts receivable when the Company has an unconditional right to contract consideration. A contract liability is recognized as deferred revenue when the Company invoices clients in advance of performing the related services under the terms of a contract. Deferred revenue is recognized as revenue when the Company has satisfied the related performance obligation.

On certain contracts with several of the Company's significant customers, the Company receives payments in advance of manufacturing. Advanced payments are recorded as deferred revenue until the revenue recognition criteria described above has been met. Related billings that are in excess of revenue earned are deferred and recorded as a liability on the consolidated balance sheet until the related services are provided.

Leases

On January 1, 2022, the Company adopted ASC 842 using the Transition method. The reported results for the year ended December 31, 2022, reflect the application of the guidance of ASC 842 while the reported results for the year ended December 31, 2021, were prepared under the guidance of ASC 840.

In February 2016, the FASB issued ASU No. 2016-02, "Leases" which sets out the principles for the recognition, measurement, presentation, and disclosure of leases for both parties to a contract (i.e., lessees and lessors). The standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases. A lease must be classified as a finance lease if any of the following criteria are met: the lease transfers ownership of the asset by the end of the lease term, the lease contains an option to purchase the asset that is reasonably certain to be exercised, the lease term is for a major part of the remaining useful life of the asset or the present value of the lease payments equals or exceeds substantially all of the fair value of the asset. A lease is classified as an operating lease if it does not meet any of these criteria. The Company determines if a contract is or contains a lease at inception or modification of a contract. A contract is or contains a lease if the contract conveys the right to control the use of an identified asset for a period in exchange for consideration. Control over the use of the identified asset means the lessee has both (a) the right to obtain substantially all of the economic benefits from the use of the asset and (b) the right to direct the use of the asset. This classification will determine whether the lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease.

Right-of-use assets and liabilities are initially measured at cost, which primarily comprises the initial amount of the lease liability, plus any initial direct costs incurred, consisting mainly of brokerage commissions, less any lease incentives received. All right of use assets are reviewed for impairment. The lease liability is initially measured at the present value of future minimum lease payments over the expected lease term at the commencement date of each lease. The Company measures and records a right-of-use asset and lease liability based on the discount rate implicit in the lease, if known. Generally, the Company cannot determine the interest rate implicit in the lease because it does not have access to the lessor's estimated residual value or the amount of the lessor's deferred initial direct costs.

In these cases where the discount rate implicit in the lease is not known, the Company measures the right-of-use assets and lease liabilities using a discount rate equal to the Company's incremental borrowing rate it pays on current debt instruments or would have to pay on a collateralized basis to borrow an amount equal to the lease payments under similar terms.

The Company and its subsidiary have no leases classified as finance leases. The Company and its subsidiary currently lease plant, office facilities and equipment under operating leases expiring through August 2024. As of December 31, 2022, the weighted average remaining lease term for our operating leases was 20.2 months. The weighted average discount rate for our operating leases was 12.8%.

The Company's lease agreements may include options to extend the lease following the initial term. On a case-by-case basis, the Company's management determines if it is reasonably certain to exercise the renewal option; such renewal options were included in determining the initial lease term.

We elected the package of practical expedients in transition for leases that commenced prior to January 1, 2022, and therefore did not reassess (i) whether any expired or existing contracts are, or contain, leases, (ii) the lease classification for any expired or existing leases, and (iii) initial direct costs for any existing leases. We elected to use hindsight for transition when considering judgments and estimates such as assessments of lease options to extend, or terminate, a lease, or to purchase the underlying asset. As result of the adoption of ASC 842, the Company recognized an accumulative adjustment to beginning retained earnings for the 2022 fiscal year of $44,533.

For all asset classes, we elected to (i) not recognize a right-of-use asset and lease liability for leases with a term of 12 months or less and (ii) not separate non-lease components from lease components, and we have accounted for combined lease and non-lease components as a single lease component. Variable lease payments associated with the Company's leases are recognized upon occurrence of the event, activity, or circumstance in the lease agreement on which those payments are assessed. For those leases that are subsequently modified for terms, such changes may require a remeasurement of the lease liability.

Lease expense for operating leases consists of the lease payments plus any initial direct costs, primarily brokerage commissions, and is recognized on a straight-line basis over the lease term. Included in lease expense are any variable lease payments incurred in the period that were not included in the initial lease liability. Lease expense for finance leases consists of the amortization of the right-of-use asset on a straight-line basis over the lease term and interest expense determined on an amortized cost basis. The lease payments are allocated between a reduction of the lease liability and interest expense.

Stock-Based Compensation

We measure and recognize compensation expense for all stock-based awards granted to our employees and other service providers, including stock options granted under the 2017 Plan, 2015 and 2011 Stock Option Plans that were approved in October 2017 (the "2017 Plan"), December 2015 (the “2015 Plan”) and in December 2011 (the “2011 Plan”), respectively, based on the estimated fair value of the award. We used the Black-Scholes option pricing model to estimate the fair value of stock option awards granted under the 2017 Plan, 2015 Plan and 2011 Plan. We recognize the fair value of stock options granted under the 2017 Plan and 2015 Plan as stock-based compensation on a straight-line basis over the requisite service period. We record expense net of anticipated forfeitures and adjust the annual expense based upon actual experience.

Compensation cost for stock awards, which include restricted stock units (“RSUs”) is measured at the fair value on the grant date and recognized as expense, net of estimated forfeitures, over the related service period. The fair value of stock awards is based on the quoted price of our common stock on the grant date less the present value of expected dividends not received during the vesting period.

Our use of the Black-Scholes option pricing model requires the input of highly subjective assumptions, including the expected term of the option, expected volatility of the price of our common stock, risk-free interest rates and the expected dividend yield of our common stock. The assumptions used in our option pricing model represent management’s best estimates. These estimates involve inherent uncertainties and the application of management’s judgment. If factors change and different assumptions are used, our stock-based compensation expense could be materially different in the future.

These assumptions and estimates are as follows:

•Fair Value of Common Stock. Since the completion of our IPO, we use the closing quoted price of our common stock on the Nasdaq Capital Market on the date of grant.

•Expected Term. The expected term represents the period that our stock-based awards are expected to be outstanding. The expected term assumptions were determined based on the vesting terms and contractual lives of the options, using the simplified method.

•Expected Volatility. We use the volatility of our own share price.

•Risk-Free Interest Rate. The risk-free interest rate is based on the implied yield available on U.S. Treasury zero-coupon issues with remaining terms similar to the expected term on the options.

•Dividend Rate. We have never declared or paid any cash dividends and do not plan to pay cash dividends in the foreseeable future, and, therefore, use an expected dividend yield of zero.

We will continue to use judgment in evaluating the assumptions related to our stock-based compensation on a prospective basis. As we continue to accumulate additional data related to our common stock, we may refine our estimation process, which could materially impact our future stock-based compensation expense.

Inventory Valuation

We value our inventory at the lower of cost or its estimated net realizable value. We use the average cost method for purposes of determining cost, which approximates the first-in, first-out method. We write down inventory for excess and obsolescence based upon a review of historical usage and assumptions about future demand, product mix and possible alternative uses. Actual demand, product mix and alternative usage may be lower than those that we project, and this difference could have a material adverse effect on our gross margin if inventory write-downs beyond those initially recorded become necessary. Alternatively, if actual demand, product mix and alternative usage are more favorable than those we estimated at the time of such a write-down, our gross margin could be favorably impacted in future periods.

Goodwill, Intangible Assets and Long-lived Assets

We evaluate our goodwill, intangible and long-lived assets for impairment when events or circumstances arise that indicate our goodwill, intangible and long-lived assets may be impaired. Indicators of impairment include, but are not limited to, a significant deterioration in overall economic conditions, a decline in our market capitalization, the loss of significant business, significant decreases in funding for our contracts, or other significant adverse changes in industry or market conditions. Regardless, goodwill is tested for potential impairment at least annually.

Income Taxes

The determination of income tax expense requires us to make certain estimates and judgments concerning the calculation of deferred tax assets and liabilities, as well as the deductions and credits that are available to reduce taxable income. We recognize deferred tax assets and liabilities for the expected future tax consequences of events that have been included in our consolidated financial statements. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates for the year in which the differences are expected to reverse.

In evaluating our ability to recover deferred tax assets, we consider all available positive and negative evidence, including our past operating results, our forecast of future earnings, future taxable income, and tax planning strategies. The assumptions utilized in determining future taxable income require significant judgment. We record a valuation allowance against deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. If it becomes more likely than not that a tax asset will be used for which a reserve has been provided, we reverse the related valuation allowance. If our actual future taxable income by tax jurisdiction differs from estimates, additional allowances or reversals of reserves may be necessary.

We use a two-step approach to recognize and measure uncertain tax positions. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. We reevaluate our uncertain tax positions on a quarterly basis and any changes to these positions as a result of tax audits, tax laws or other facts and circumstances could result in additional charges to operations.

Business Combinations

We utilize the acquisition method of accounting for business combinations and allocate the purchase price of an acquisition to the various tangible and intangible assets acquired and liabilities assumed based on their estimated fair values. We primarily establish fair value using the income approach based upon a discounted cash flow model. The income approach requires the use of many assumptions and estimates including future revenues and expenses, as well as discount factors and income tax rates. Other estimates include:

- estimated step-ups or write-downs for fixed assets and inventory;
- estimated fair values of intangible assets; and
- estimated income tax assets and liabilities assumed from the target.

While we use our best estimates and assumptions as part of the purchase price allocation process to accurately value assets acquired and liabilities assumed at the business acquisition date, our estimates and assumptions are inherently uncertain and subject to refinement. As a result, during the purchase price allocation period, which is generally no longer than one year from the business acquisition date, we record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill.

For changes in the valuation of intangible assets between preliminary and final purchase price allocation, the related amortization is adjusted in the period it occurs. Subsequent to the purchase price allocation period any adjustment to assets acquired or liabilities assumed is included in operating results in the period in which the adjustment is determined. Should we issue shares of our common stock in an acquisition, we will be required to estimate the fair value of the shares issued.

Recent accounting pronouncements

Per the Company’s consolidated financial statements Note 2 – Significant Accounting Policies, we may be implementing certain accounting changes as required by FASB. See Note 2 for further details.

Recently implemented accounting pronouncements

Effective January 1, 2022, the Company implemented ASU No. 2016-02, *Leases* ("ASU 2016-02"). Under ASU 2016-02, the Company recognized for all leases a lease liability, which is our obligation to make lease payments arising from a lease, measured on a discounted basis and a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. The Company elected to use the transition method and reflected the cumulative effect of adoption as an adjustment to beginning retained earnings.

Interest rate risk

Our exposure to interest rate risk is primarily associated with borrowing on revolving lines of credit denominated in both U.S. dollars and Euros. We are exposed to the impact of interest rate changes primarily through our borrowing activities for our variable rate borrowings. The Federal Reserve interest rates have increased recently and may increase further in the near term.

Concentration of credit risk

At times, deposits held with financial institutions may exceed the amount of insurance provided by the Federal Deposit Insurance Corporation ("FDIC") and Securities Investor Protection Corporation ("SIPC"), of which both provide basic deposit coverage with limits up to $250,000 per owner. As of December 31, 2022, the Company had $2,378,546 of cash in our accounts that exceeded the insurance limits. The Company has not experienced any such losses in these accounts, and believes that the financial institutions at which such amounts are held are stable; however, no assurances can be provided. In Germany, the deposit insurance is €100,000 per bank, per customer. OSS Europe has funds on deposit in both Euro and U.S. dollar denominations of €145,599 (US$156,261) with banks in excess of the insurance limits.

We provide credit to our customers in the normal course of business. We perform ongoing credit evaluations of our customers' financial condition and limit the amount of credit extended when deemed necessary.

Foreign currency risk

We operate primarily in the United States. Foreign sales of products and services are primarily denominated in U.S. dollars. We also conduct business outside the United States through OSS Europe our foreign subsidiary in Germany, where business is largely transacted in non-U.S. dollar currencies, particularly the Euro, which is subject to fluctuations due to changes in foreign currency exchange rates. Accordingly, we are subject to exposure from changes in the exchange rates of local currencies. Foreign currency transaction gains and losses are recorded in other income (expense), net in the consolidated statements of operations.

OSS GmbH operates as an extension of OSS' domestic operations and acquired Bressner Technology GmbH in October 2018. The functional currency of OSS GmbH is the Euro. Transactions denominated in currencies other than the functional currency are remeasured to the functional currency at the average exchange rate in effect during the period. At the end of each reporting period, monetary assets and liabilities are translated using exchange rates in effect at the balance sheet date. Non-monetary assets and liabilities are remeasured at historical exchange rates. Consequently, changes in the exchange rates of the currencies may impact the translation of the foreign subsidiaries' statements of operations into U.S. dollars, which may in turn affect our consolidated statement of operations. The resulting foreign currency translation adjustments are recorded as a separate component of accumulated other comprehensive income in the consolidated statement of comprehensive income.

Derivative financial instruments

We may employ derivatives to manage certain currency market risks through the use of foreign exchange forward contracts. We do not use derivatives for trading or speculative purposes. Our derivatives are designated as a hedge of a forecasted transaction or of the variability of cash flows to be received or paid related to a recognized asset or liability (cash flow hedge). We hedge a portion of the exchange risk involved in anticipation of highly probable foreign currency-denominated transactions. In anticipation of these transactions, we enter into foreign exchange contracts to provide currency at a fixed rate.

Non-GAAP financial measures

Adjusted EBITDA

We believe that the use of adjusted earnings before interest, taxes, depreciation and amortization, or adjusted EBITDA, is helpful for an investor to assess the performance of the Company. The Company defines adjusted EBITDA as income (loss) before interest, taxes, depreciation, amortization, acquisition expense, impairment of long-lived assets, financing costs, fair value adjustments from purchase accounting, stock-based compensation expense and expenses related to discontinued operations.

Adjusted EBITDA is not a measurement of financial performance under generally accepted accounting principles in the United States, or GAAP. Because of varying available valuation methodologies, subjective assumptions and the variety of equity instruments that can impact a company's non-cash operating expenses, we believe that providing a non-GAAP financial measure that excludes non-cash and non-recurring expenses allows for meaningful comparisons between our core business operating results and those of other companies, as well as providing us with an important tool for financial and operational decision making and for evaluating our own core business operating results over different periods of time.

Our adjusted EBITDA measure may not provide information that is directly comparable to that provided by other companies in our industry, as other companies in our industry may calculate non-GAAP financial results differently, particularly related to non-recurring and unusual items. Our adjusted EBITDA is not a measurement of financial performance under GAAP, and should not be considered as an alternative to operating income or as an indication of operating performance or any other measure of performance derived in accordance with GAAP. We do not consider adjusted EBITDA to be a substitute for, or superior to, the information provided by GAAP financial results.

	For the Year Ended December 31, 2022	2021
Net (loss) income	$ (2,229,055)	$ 2,332,773
Depreciation and amortization	1,050,299	1,480,608
Stock-based compensation expense	1,991,117	1,695,105
Interest income	(237,751)	(244,382)
Interest expense	162,391	527,139
PPP loan and interest forgiveness	-	(1,514,354)
Provision for income taxes	4,423,597	605,675
Adjusted EBITDA	$ 5,160,598	$ 4,882,564

Adjusted EPS

Adjusted EPS excludes the impact of certain items and, therefore, has not been calculated in accordance with GAAP. We believe that exclusion of certain selected items assists in providing a more complete understanding of our underlying results and trends and allows for comparability with our peer company index and industry. We use this measure along with the corresponding GAAP financial measures to manage our business and to evaluate our performance compared to prior periods and the marketplace. The Company defines non-GAAP income (loss) as income or (loss) before amortization, stock-based compensation, expenses related to discontinued operations, and acquisition costs. Adjusted EPS expresses adjusted income (loss) on a per share basis using weighted average diluted shares outstanding.

Adjusted EPS is a non-GAAP financial measure and should not be considered in isolation or as a substitute for financial information provided in accordance with GAAP. These non-GAAP financial measures may not be computed in the same manner as similarly titled measures used by other companies. We expect to continue to incur expenses similar to the adjusted income from continuing operations and adjusted EPS financial adjustments described above, and investors should not infer from our presentation of these non-GAAP financial measures that these costs are unusual, infrequent or non-recurring.

The following table reconciles net income to adjusted EPS and diluted earnings per share:

	For the Year Ended December 31, 2022	2021
Net (loss) income	$ (2,229,055)	$ 2,332,773
Amortization of intangibles	63,231	556,842
Stock-based compensation expense	1,991,117	1,695,105
PPP loan and interest forgiveness	-	(1,514,354)
Non-GAAP net (loss) income	$ (174,707)	$ 3,070,366
Non-GAAP net (loss) income per share:		
Basic	$ (0.01)	$ 0.17
Diluted	$ (0.01)	$ 0.16
Weighted average common shares outstanding:		
Basic	19,730,698	18,305,878
Diluted	19,730,698	19,503,737

Free Cash Flow

Free cash flow, a non-GAAP measure for reporting cash flow, is defined as cash provided by operating activities less capital expenditures for property and equipment, which includes capitalized software development costs. We believe free cash flow provides investors with an important perspective on cash available for investments and acquisitions after making capital investments required to support ongoing business operations and long-term value creation. We believe that trends in our free cash flow can be valuable indicators of our operating performance and liquidity.

Free cash flow is a non-GAAP financial measure and should not be considered in isolation or as a substitute for financial information provided in accordance with GAAP. This non-GAAP financial measure may not be computed in the same manner as similarly titled measures used by other companies.

We expect to continue to incur expenditures similar to the free cash flow adjustments described above, and investors should not infer from our presentation of this non-GAAP financial measure that these expenditures reflect all of our obligations which require cash. The following table reconciles cash provided by operating activities, the most directly comparable GAAP financial measure, to free cash flow:

Cash flow:	**For the Year Ended December 31, 2022**	**2021**
Cash (used in) provided by operating activities	$ (7,806,025)	$ 5,622,596
Capital expenditures	(529,908)	(563,815)
Free cash flow	$ (8,335,933)	$ 5,058,781

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Not Applicable.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

See the financial statements included elsewhere in this Annual Report beginning at page F-1, which are incorporated herein by reference.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES.

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic and current reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable and not absolute assurance of achieving the desired control objectives. In reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. In addition, the design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, control may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, as of the end of the period covered by this Annual Report. Based on such evaluation, our principal executive officer and principal financial officer have concluded that as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal controls over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Internal control over financial reporting is a process designed under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. Our internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements. Because of its inherent limitations, internal controls over financial reporting may not prevent or detect all misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. We have conducted an evaluation of the effectiveness of our internal control over financial reporting. Based on our evaluation, management has concluded that our internal control over financial reporting was effective as of December 31, 2022.

Attestation Report of the Independent Registered Public Accounting Firm

This Annual Report does not include an attestation report of our independent registered public accounting firm due to an exemption established by the JOBS Act for "emerging growth companies."

Changes in Internal Control over Financial Reporting

There has been no material change in our internal controls over financial reporting during the year ended December 31, 2022, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management's goal is to continue to improve upon our internal control environment as we refine our processes and procedures to address our growing business and operations in other geographies. As we continue to evaluate and take actions to improve our internal control over financial reporting, we may determine to take additional actions to address control deficiencies or determine to modify our plan based upon changes in our internal control environment.

ITEM 9B. OTHER INFORMATION.

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS.

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

Executive Officers and Directors

The following table sets forth the names, ages, and positions of our executive officers and directors as of February 28, 2023. There are no arrangements, agreements or understandings between non-management security holders and management under which non-management security holders may directly or indirectly participate in or influence the management of our affairs. There are no arrangements or understandings between any director and any other person pursuant to which any director or executive officer was or is to be selected as a director or executive officer, as applicable. There currently are no legal proceedings, and during the past ten years there have been no legal proceedings that are material to the evaluation of the ability or integrity of any of our directors or director nominees.

Name	Age	Position
Executive Officers:		
David Raun	61	President, Chief Executive Officer and Director
John W. Morrison, Jr.	65	Chief Financial Officer, Treasurer and Secretary
Jim Ison	53	Chief Product Officer and Chief Sales & Marketing Officer
Non-Employee Directors:		
Kenneth Potashner (1)(2)(3)	65	Chairman
Jack Harrison (1)(3)(4)	67	Director
Kimberly Sentovich (1)(2)	55	Director
Sita Lowman (2)(4)	58	Director
Gioia Messinger (2)(3)(4)	60	Director
Greg Matz (1)(4)	63	Director

(1) Member of the Nominating and Corporate Governance Committee.

(2) Member of the Compensation Committee.

(3) Member of the Strategic Transition Committee.

(4) Member of the Audit and Risk Committee

Executive Officers

David Raun served as our interim chief executive officer from February 15, 2020 until June 24, 2020, when he was appointed as the Company's president and chief executive officer. Mr. Raun formerly served as the audit chair on the OSS board of directors and serves as a director. Mr. Raun was with PLX Technology, Inc. ("PLX"), a company that used to be publicly traded on Nasdaq, from 2004-2014, where he eventually became president, chief executive officer and a director. In this role, he led the company to an acquisition by Avago (now Broadcom) after driving the company to large PCI Express market share, record revenues and profits. This PCIe switch leadership position at PLX makes him very familiar with the OSS markets and the components he defined and marketed to many of OSS products. Mr. Raun also served as chief operations officer at Home Bay Technologies ("Home Bay"), an on-line technology based real estate company in 2019. Prior to joining Home Bay, he was the president, COO and interim chief financial officer at ASSIA, Inc. ("ASSIA"), a Silicon Valley-based SaaS provider from 2016-2018. While there, he led a turnaround effort, driving ASSIA to record revenues and sizable operating margins. Prior to these roles, he held multiple VP of marketing, business development, corporate development, and sales roles. He served as chairman of the board at Kilopass, a semiconductor IP supplier, until they were acquired by Synopsys in 2019. Mr. Raun holds a B.S. in computer and electrical engineering from University of California, Santa Barbara. Mr. Raun has more than 25 years of experience at senior management and board levels in public and private companies including over 10 M&A/fund raising events.

John W. Morrison, Jr. has served as our chief financial officer since September 1, 2017. Mr. Morrison is a CPA with more than three decades of experience in public accounting and all aspects of financial reporting and financing. From June 2014 to September 2017, he served as the chief financial and operations officer for the Carol Cole Company ("Carole Cole"). Prior to joining Carol Cole, he served as a consultant to various private companies regarding their financial and operational affairs. From January 2013 to September 2013, he served as the chief financial officer of Gen-E, an information technology and services company. Mr. Morrison also served as the executive vice president and chief financial officer for the Kelley Blue Book Company for 11 years. He began his career working 15 years for the public accounting firm

PricewaterhouseCoopers (now PwC) both in the U.S. and Asia. Mr. Morrison holds a B.S. in accounting and business management and MACC in Accounting from Brigham Young University.

Jim Ison, has been with OSS since 2004, and currently serves as the chief product officer and chief sales and marketing officer. Mr. Ison has nearly three decades of combined sales, product management and marketing management experience in leading-edge large-scale electronic systems using breakthrough technologies. His expertise covers government, communications and HPC markets with particular focus on AI applications in unique environments. Prior to joining OSS, Mr. Ison held senior sales and marketing positions for Ziatech and Rittal. During the 17 years he has served in a management role at OSS, he has led the technological evolution. Mr. Ison holds a bachelor's degree in Aeronautical Engineering from CalPoly SLO and an MBA from University of Florida.

Board of Directors

Kenneth Potashner has served as Chairman of our board of directors since May 2019. Mr. Potashner has extensive board experience in high growth, high technology global organizations. He served as Chairman of Newport Corporation, where he provided 18 years of service culminating in the sale of Newport in 2016 for $980 million. Mr. Potashner served as Chairman of the board of Maxwell Technologies and directed it through a period of rapid expansion. He has also served on the board of California Micro Devices, SonicBlue Inc, and Singapore Technologies, all publicly traded companies. Mr. Potashner is currently serving as the Executive Chairman of Generation Esports and on the board of directors of Launch Factory and Prologue Mobile. He has also served on the board of many private companies as well, including DynaOptics, MyOffice.com, Underground Elephant, Home Bay, Lumedyne, Events.com, and several others. Several of the private companies that Mr. Potashner has had affiliations with have achieved successful exits or significant financings. Mr. Potashner has a BSEE from Lafayette College and an MSEE from SMU, Executive certifications from Columbia and INSEAD in Lausanne, Switzerland. He also has an Advanced Professional Director certification from American Board of Directors.

Jack Harrison has served on our board of directors since December 2016. He founded, and served as president and chief executive officer of, Aspen Integrated Technologies, a world-class development engineering and manufacturing center of advanced microelectronics, which he grew through organic reinvestment and acquisition and which had a successful exit in 2011. The companies that he has founded and/or worked for previously have been responsible for the assembly development and manufacture of microfluidic semiconductor DNA gene sequencing devices, next-gen military RF radar, missile guidance systems, miniaturization of neuro-modulation sensors and transmitters, medical implant devices, and more. Customers for such companies included major medical and technology companies, government prime contractors, NASA, DARPA, and others. Mr. Harrison is currently the president of Integrity Energy and serves as the chairman of the board of Reach Beyond, a non-profit charitable organization with which he has been affiliated for more than two decades. Mr. Harrison is an angel investor in several technology start-up companies and holds a BME degree from Wheaton College. He brings decades of experience in the microelectronics space and his business and technical expertise represent important assets to OSS.

Kimberly Sentovich joined our board of directors in February 2019, and is a seasoned merchandising, operations, IT, and supply chain executive with three decades of experience with multi-billion-dollar profit and loss responsibility. Ms. Sentovich currently serves as the CEO of Rachio, a smart irrigation controller IoT device B-corp company focused on water efficiency. Before joining Rachio, she consulted for venture and private equity companies. Ms. Sentovich served in senior operations roles at Torrid and was Executive Vice President of Stores and Logistics at Gymboree, where she was responsible for 1,300 company-owned stores in North America from 2015-2018. Ms. Sentovich previously worked seven years (2008-2015) at Walmart, rising from Regional Vice President of Operations – California to Divisional Senior Vice President of Operations – Pacific Division and fifteen years at The Home Depot (1993-2008), rising to the level of Regional Vice President of Operations. Ms. Sentovich obtained her MBA from The Paul Merage School of Business, University of California, Irvine, and her B.A. in Philosophy and Political Science with a Minor in Economics from Bryn Mawr College. Ms. Sentovich's extensive executive and operations experience, as well as her independence, judgment, and exceptional leadership experience, make her a valuable addition to our board.

Sita Lowman joined our board of directors in July 2020, and is a Fortune 500 executive with business transformation and technology expertise. Her expertise identifying market trends, organizing multi-national diverse teams to quickly react to these trends, and leveraging partnerships to expand globally make her frequently called upon to lead new business ventures and to turn around struggling businesses. From 2017 to 2021, Ms. Lowman served as Vice President and General Manager for the Platform Services business of DXC Technologies, a multi-billion-dollar IT services Fortune 500 Company. At DXC, she actively engaged in strategic partnerships with the world's largest public cloud providers and Enterprise application providers, with responsibilities including P&L financial management, GTM and operations activities. Prior to that, Ms. Lowman served as Senior Director, Enterprise Solutions on Demand Service Offering Management, Workload and Cloud for Hewlett Packard Enterprise. She has also held General Manager roles at Nortel Networks and Texas Instruments (TI) Defense Group (acquired by Raytheon). Ms. Lowman serves on the board of Mortgage Guaranty Insurance Corporation (NYSE: MTC) and serves on their Business Transformation and Technology Committee. Ms. Lowman is currently an advisor with the San Diego start-up community through her involvement with San Diego based Launch Factory, UC San Diego Rady School of Management, and USD Knauss School of Business. Ms. Lowman holds a BSS of Electrical Engineering from Auburn University. Ms. Lowman's extensive Fortune 500 P&L and GTM experience in the Technology sector servicing defense, automotive and other large commercial industries make her well suited to serve on our board.

Gioia Messinger, joined our board of directors in July 2020. Since 2012, Ms. Messinger has served as founder and principal of LinkedObjects, Inc., a strategic advisory services business focused on digital transformation brought about by AI and the IoT. From 2004 to 2012, Ms. Messinger served as founder and chief executive officer of Avaak, Inc., now Arlo Technologies (NYSE:ARLO), a leading home security systems company. From 1989 to 2004, Ms. Messinger served as founder and president of SUMMIT Design Technologies, Inc., an engineering services firm with customers in the commercial, defense and healthcare sectors. Ms. Messinger currently serves on the board of directors of Guild Holdings Company (NYSE:GHLD), a nationally recognized residential mortgage lender, Indyme Solutions, LLC, a provider of AI solutions for the world's largest retailers, and CARI Health, Inc., a developer of innovative personalized healthcare solutions. She previously served on the board of Vicon Industries (NYSE:VCON). Ms. Messinger is a member of the dean's council of advisors at the University of California San Diego, Jacobs School of Engineering, and is a member of the Latino Corporate Directors Association. Ms. Messinger obtained her master of business administration degree from the Paul Merage School of Business at the University of California, Irvine and bachelor of science in Computer Engineering from the University of California, San Diego. She has a certificate in Cyber Risk Governance for US Public Companies. Ms. Messinger's business, operations and management experience, coupled with her technology thought leadership and industry relationships, make her an invaluable asset to our board.

Greg Matz, CPA, joined our board of directors in July 2020, and is an experienced financial executive, having served in controller, Vice President and CFO roles for over two decades. Now retired, Mr. Matz is currently serving as a member of the board of directors and audit committee chair for Dare Bioscience, Inc. (NASDAQ: DARE), a public clinical-stage biopharmaceutical company. Mr. Matz also chairs the Dean's Council for the University of San Francisco's School of Management. From 2011 to 2016, he worked for The Cooper Companies, Inc. (NYSE: COO), holding roles as the Senior Vice President and Chief Financial Officer and Chief Risk Officer. From 2010 to 2011, Mr. Matz was the Chief Financial Officer for CooperVision, a business unit of The Cooper Companies, Inc. Prior to joining The Cooper Companies, Inc., he held key management roles in finance and marketing at Agilent Technologies and Hewlett Packard. He began his career at KPMG and is a CPA with an active certification. Mr. Matz graduated from the University of San Francisco with a B.S. in Business Administration and completed the University of Pennsylvania, The Wharton School's Advanced Management Program. Mr. Matz is also a National Association of Corporate Directors ("NACD") Board Leadership Fellow and has earned the NACD Directorship Certification credential. Our board of directors believes Mr. Matz's experience as a chief financial officer and chief risk officer of a public company and his corporate experience in financial functions, risk management, capital markets and corporate strategy qualify him to serve as a member of our board of directors.

Advisory Board

As discussed elsewhere in this Annual Report, in the second quarter of 2022, we formed an advisory board consisting of retired high-ranking military officials and corporate executives in order to aid in the acceleration of our pursuit of the AI Transportables market, and the military sector in particular. Members of the advisory board are not employees or directors of the Company, and have no decision-making authority over our activities. However, we value their guidance and intend to consider their input, as appropriate, when making strategic decisions in areas of our business that members of the advisory board have experience in. In addition, our advisors may have arrangements with other companies to assist those companies in developing products or technologies that may compete with ours. Our advisors may be affiliated with other entities, and devote only a small portion of their time to us. During the year ended December 31, 2022, we issued each member of our advisory board 1,000 restricted stock units as compensation for services provided in their role as advisory board members, which restricted stock units cliff vested six months from the date of grant.

Each of the members of our advisory board, as well as a brief summary of their relevant experience, is identified below.

Kieran Carroll is a technology executive with deep experience building and delivering artificial intelligence-enabled products to commercial and government clients. Currently, he serves as chief of staff and head of government affairs for ZeroEyes, Inc., the industry's leading AI Based video analytics weapons detection platform. Mr. Carroll came to ZeroEyes from PricewaterhouseCoopers, where he worked with clients in telecommunications, financial services, and healthcare. Previously, he served as a naval officer at Special Operations Forces and Intelligence Community organizations and deployed to Afghanistan, Africa, and the Middle East. He currently serves on the board of directors for the Data Ethics Consortium for Security (DECS) and sits on advisory boards of several technology companies, including BreachBits, Advisar AI, and DroneHQ. Mr. Carroll is a graduate of the United States Naval Academy and received an MBA from Cornell University's Johnson Graduate School of Management.

Mike Dumont brings expertise in government, aerospace and defense, risk management and organizational leadership. He is a retired three-star admiral, and his career includes having served as the deputy commander of U.S. Northern Command and vice commander of North American Aerospace Defense Command. He oversaw military responses to border security, natural disasters, and the COVID-19 pandemic in the United States, where AI solutions were deployed to meet operational demands. He also led teams in providing aerospace warning, aerospace control, missile defense and maritime warning, and generating globally integrated effects using information enabled by AI. Adm. Dumont serves on the board of directors of the Marines' Memorial Association, the board of advisors of Dataminr, Inc., and the national security advisory council of the U.S. Global Leadership Coalition. He holds a B.A. degree from the University of Southern Maine and a J.D. degree from Suffolk University Law School.

Robin Fontes is a retired U.S. Army Major General who brings extensive experience in government, defense, and diplomacy. She most recently served as the Deputy Commanding General of U.S. Army Cyber Command synchronizing cyberspace operations in pursuit of Department of Defense and Army strategic priorities. During her nearly 35-year career, she also commanded three multi-national units in Afghanistan, and oversaw some of the nation's largest programs providing military equipment and services to foreign partners and allies. Robin currently serves on the board of directors of the Marines' Memorial Foundation, the board of advisors for the Center for Cyber Security Innovations at the City University of Seattle, and the board of advisors for Kronos Fusion Energy Defense Systems. She is a graduate of the United States Military Academy at West Point (BS), the University of Washington (MA), and the National War College (MS).

Christopher Lever has spent his 32-year career in the technology sector, including AI, leading functional organizations in finance, product management and sales. His M&A experience includes 12 transactions valued at over $2 billion in the aggregate. For the past 21 years, Mr. Lever has worked in executive leadership roles within embedded computing. At General Electric ("GE"), he was director, global sales, and then general manager, embedded where he had full profit and loss responsibility for the $200 million embedded business. Mr. Lever led the team for the successful sale in 2015 of GE's embedded business to Veritas Capital for $515 million. Then, with Abaco Systems, Mr. Lever served as executive vice president, corporate development. In addition to completing two M&A transactions, he forged a partnership with NVIDIA for exclusive access to components used for Abaco's AI/autonomous product line. In 2021, Mr. Lever led the company's M&A process, leading to the sale of Abaco to AMETEK, Inc. for $1.35 billion. Mr. Lever brings significant depth in many of our target markets in the AI Transportables space.

Scott Orton has an extensive background in DoD acquisition, system development, and successful program execution. In his prior role as vice president and general manager of Edge Processing for Mercury Systems, Mr. Orton had full responsibility for Mercury's Edge and Secure computing businesses. He has extensive knowledge of computing systems design, computing product life cycles, global supply chain dependencies, commercial military sales, and security needs for advanced AI/ML computing at the edge. In addition to Mercury Systems, Mr. Orton held positions including technical director, capture manager, and program director at Raytheon, as well as multiple positions within DoD Acquisition. Mr. Orton has a Master's degree in Systems Engineering from Johns Hopkins University, and a Bachelor's degree in Mechanical Engineering from the University of Florida. His successful focus on the DOD throughout his career, including his senior role at Mercury Systems, considered to be the one-thousand pound gorilla in the fragmented competitive landscape, along with his years at Raytheon, one of our largest customers, is expected to provide great insight and value for us.

Roger Stanton is a retired Naval Aviator and Test Pilot with over 22 years of experience in the design, development, and fielding of advanced aerospace systems, including AI. He is an expert in the application of cutting-edge technology to complex maritime military operations, and a thought-leader on the organizational and business implications of AI. Mr. Stanton is currently a strategic account executive at DataRobot, an enterprise AI company helping customers rapidly derive business value from machine learning. He holds a BS in Materials Science and Engineering from Carnegie Mellon University, an MS in Systems Engineering from the Naval Postgraduate School, an MS in Operations Research from Southern Methodist University, and an MBA from the Darden School of Business.

Lex Turner currently serves as vice president of remote operations for Phantom Auto, an innovative company enabling people to remotely operate vehicles across sites from thousands of miles away. In this capacity, Mr. Turner is responsible for a business unit providing Remote Operations as A Service focused on the logistics industry in effort to help solve the global supply chain crisis plagued with labor shortages by detaching labor from location. From 2011 to 2021, Mr. Turner served in C-level and director positions with private and publicly traded Fortune 500 companies focused on providing Big Data, Analytics, and Digital Transformation solutions to the Intelligence Community, where he continues to consult. He began his career as a US Navy Fighter Pilot, TOPGUN graduate and Desert Storm Veteran. After 9/11, he transitioned to the US Air Force, where he flew Predator and Reaper Remotely Operated Aircraft. Mr. Turner held Squadron and Group Command positions serving extensively in Iraq and Afghanistan. He culminated his military service at the Pentagon on the Air Staff as Deputy Director for Air Operations with oversight of $42B of Air Force programs and 32,000 officers and enlisted Aircrew, retiring as a Colonel. Mr. Turner maintains a TS/SCI clearance with Polygraph and holds a Bachelor's degree in Industrial Management and an MBA from the University of Alabama, Manderson Graduate School of Business. In his spare time, he flies the A320 Airbus for United Airlines.

Board Composition and Election of Directors

Director Independence

Our board of directors currently consists of seven members. Our board of directors has determined that Kenneth Potashner, Jack Harrison, Kim Sentovich, Sita Lowman, Gioia Messinger and Greg Matz are all independent directors in accordance with the listing requirements of The Nasdaq Capital Market. The Nasdaq independence definition includes a series of objective tests, including that the director is not, and has not been for at least three years, one of our employees, and that neither the director nor any of his or her family members have engaged in various types of business dealings with us. In addition, as required by Nasdaq rules, our board of directors has made a subjective determination as to each independent director that no relationships exist, which, in the opinion of our board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In making these determinations, our board of directors reviewed and discussed information provided by the directors and us with regard to each director's business and personal activities and relationships as they may relate to us and our management.

Board Committees and Independence

Our board of directors has established three standing committees – audit and risk, compensation and nominating and corporate governance – each of which operates under a charter that has been approved by our board of directors. Additionally, in February 2023 our board of directors constituted a new committee of the board, the Strategic Transition Committee.

Audit and Risk Committee

The audit and risk committee's main function is to oversee our accounting and financial reporting processes and the audits of our financial statements. This committee's responsibilities include, among other things:

1. Managing our independent registered public accounting firm, including:

   - selection and retention (subject to input by the Company's stockholders), evaluation and termination when appropriate;
   - setting their compensation;
   - overseeing their work and pre-approving all audit services they provide;
   - approving all permitted non-audit services they perform;
   - establishing policies and procedures for their engagement to provide permitted audit and non-audit services;
   - at least annually, receiving and reviewing a report by the independent registered public accounting firm describing their internal quality- control procedures and any material issues raised by the most recent internal

quality-control review, peer review or Public Company Accounting Oversight Board ("PCAOB") review, of the independent auditing firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the firm, and any steps taken to deal with any such issues; and other required reports from the independent registered public accounting firm; and

•at least annually, considering their independence, including whether their provision of permitted non-audit services is compatible with independence, and obtaining and reviewing a report describing all the relationships between them and the Company.

2.Reviewing the audit scope and plan of independent auditors, and effective use of audit resources.

3.Reviewing with management and our independent auditors the Company's annual (Form 10-K) and quarterly (Form 10-Q) financial statements and related footnotes, the auditor's judgments about the quality of the Company's accounting principles as applied in its financial reporting, and significant changes in their audit plan and serious difficulties or disputes with management encountered during the audit, and matters required by PCOAB AS1301 (Communication with Audit committees).

4.Reviewing with management and the independent auditors their significant audit findings, and assessing the steps that management has taken or proposes to take to minimize significant financial risks or exposures facing the Company, and periodically reviewing compliance with such steps.

5.Reviewing management's annual internal control report, which acknowledges management's responsibility for establishing and maintaining an adequate internal control structure and procedures for financial reporting, and contains an assessment of the effectiveness of the internal control structure.

6.Discussing with management and the independent auditor, at least semi-annually, policies and programs with respect to enterprise risks, including the risk management process, risk assessments, and significant areas of risk or exposure for the Company.

7.Assisting our board of directors and overseeing and monitoring the Company's senior management with carrying out its responsibilities, such as identifying and assessing the material risks the company faces; establishing a risk management, crisis management and emergency response plans; overseeing financial, strategic and market risks as well as other risks the Company may face, and approving the Company's enterprise wide risk management framework in conjunction with the board of directors.

8.Establishing procedures for the Company's confidential and anonymous receipt, retention, and treatment of complaints regarding the Company's accounting, internal controls and auditing matters, as well as for the confidential, anonymous submissions by Company employees of concerns regarding questionable accounting or auditing matters.

9.Obtaining the advice and assistance, as appropriate, of independent counsel and other advisors as necessary to fulfill the responsibilities of the audit and risk committee, and receiving appropriate funding from the Company, as determined by the audit and risk committee, for the payment of compensation to any such advisors.

10.Conducting an annual performance evaluation of the audit and risk committee and annually evaluating the adequacy of its charter.

The members of our audit and risk committee are Mr. Matz, Ms. Lowman, Ms. Messinger, and Mr. Harrison. Mr. Matz serves as the chairperson of the committee. All members of our audit and risk committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and The Nasdaq Capital Market. Our board of directors has determined that Mr. Matz qualifies as an "audit committee financial expert" as defined by applicable SEC rules and has the requisite financial sophistication as defined under the applicable Nasdaq rules and regulations. Our board of directors has determined that Mr. Matz, Ms. Lowman, Ms. Messinger, and Mr. Harrison are independent under the applicable rules of the SEC and The Nasdaq Capital Market.

We are currently in compliance with Nasdaq rules and Rule 10A-3 since all members of our audit and risk committee have been deemed independent by our board of directors. The audit and risk committee operates under a written charter that satisfies the applicable standards of the SEC and The Nasdaq Capital Market. In February 2021, this committee added enterprise risk assessment and management to their charter and changed the name of the committee from the audit committee to the audit and risk committee.

Compensation Committee

Our compensation committee approves, or recommends to our board of directors, policies relating to compensation and benefits of our officers and employees. The compensation committee approves, or recommends to our board of directors, annual and long-term corporate goals and objectives relevant to the compensation of our chief executive officer and other executive officers, evaluates the performance of these officers in light of those goals and objectives and approves, or recommends to our board of directors, the compensation of these officers based on such evaluations. The compensation committee also approves, or recommends to our board of directors, the issuance of stock options and other awards under our equity incentive plans. The compensation committee will review and evaluate, at least annually, the performance of the compensation committee and its members, including compliance by the compensation committee with its charter.

The members of our compensation committee are Ms. Sentovich, Mr. Potashner, Ms. Lowman, and Ms. Messinger. Ms. Sentovich serves as the chairperson of the committee. Our board of directors has determined that Ms. Sentovich, Mr. Potashner, Ms. Lowman, and Ms. Messinger are all independent under the applicable rules and regulations of The Nasdaq Capital Market and all current members qualify as a “non-employee director” as defined in Rule 16b-3 promulgated under the Exchange Act. Our board of directors has determined that each of the members of our compensation committee is an “outside director,” as that term is defined in Section 162(m) of the U.S. Internal Revenue Code of 1986, as amended, or Section 162(m). We are currently in compliance with Nasdaq rules since all members of our compensation committee have been deemed independent by our board of directors. The compensation committee operates under a written charter, which the compensation committee will review and evaluate at least annually.

Nominating and Corporate Governance Committee

The nominating and corporate governance committee is responsible for assisting our board of directors in discharging the board of directors’ responsibilities regarding the identification of qualified candidates to become board members, the selection of nominees for election as directors at our annual meetings of stockholders (or special meetings of stockholders at which directors are to be elected), and the selection of candidates to fill any vacancies on our board of directors and any committees thereof. In addition, the nominating and corporate governance committee is responsible for overseeing our corporate governance policies, reporting and making recommendations to our board of directors concerning governance matters and oversight of the evaluation of our board of directors.

The members of our nominating and corporate governance committee are Mr. Harrison, Mr. Potashner, Ms. Sentovich, and Mr. Matz. Mr. Harrison serves as the chairman of the committee. Our board of directors has determined that Mr. Harrison, Mr. Potashner, Ms. Sentovich and Mr. Matz are all independent under the applicable rules and regulations of The Nasdaq Capital Market relating to nominating and corporate governance committee independence. We are currently in compliance with Nasdaq rules due to the fact that all members of our nominating and corporate governance committee have been deemed independent by our board of directors. The nominating and corporate governance committee operates under a written charter, which the nominating and corporate governance committee will review and evaluate at least annually.

Strategic Transition Committee

As discussed elsewhere in this Annual Report, in February 2023, our board of directors constituted a new committee of the board, the strategic transition committee, to assist in the identification, transition and retention of a successor chief executive officer, including to work with the engaged search firm to accomplish the foregoing, to provide support to our management team throughout the transition, and to perform other duties as may be necessary or desirable from time to time in connection with the reorganization of the Company. We currently expect that the strategic transition committee will be disbanded shortly after the appointment of a successor chief executive officer is appointed.

The members of our strategic transition committee are Mr. Harrison, Mr. Potashner, and Ms. Messinger. Mr. Harrison serves as the chairperson of the committee.

Board Diversity

Our nominating and corporate governance committee is responsible for reviewing with the board of directors, on an annual basis, the appropriate characteristics, skills, and experience required for the board of directors as a whole and its individual members. In evaluating the suitability of individual candidates (both new candidates and current members), the nominating and corporate governance committee, in recommending candidates for election, and the board of directors, in approving (and, in the case of vacancies, appointing) such candidates, will consider many factors, including the following:

- personal and professional integrity, ethics and values;

- experience in corporate management, such as serving as an officer or former officer of a publicly-held company;
- experience as a board member or executive officer of another publicly-held company;
- strong finance experience;
- diversity of expertise and experience in substantive matters pertaining to our business relative to other board members;
- diversity of background and perspective, including, but not limited to, with respect to age, gender, race, place of residence and specialized experience;
- experience relevant to our business industry and with relevant social policy concerns; and
- relevant academic expertise or other proficiency in an area of our business operations.

Currently, our board of directors evaluates each individual in the context of the board of directors as a whole, with the objective of assembling a group that can best maximize the success of the business and represent stockholder interests through the exercise of sound judgment using its diversity of experience in these various areas. The board values diversity and supports having directors of diverse gender, race, and ethnicity, along with varied skills and experiences. Information regarding the diversity of our board members is outlined in the below table:

OSS Board Diversity Matrix (January 1, 2023)

Total Number of Directors	7			
	Female	Male	Non-Binary	Gender Not Disclosed
Part 1: Gender Identity				
Directors	3	4	0	0
Part II: Demographic Background				
Hispanic or Latinx	2	0	0	0
White	1	4	0	0
Did Not Disclose Demographic Background	0			

Family Relationships

There are no family relationships between or among the directors, executive officers or persons nominated or chosen by us to become directors or executive officers.

Involvement in Certain Legal Proceedings

To the best of our knowledge, during the past ten years, none of the following occurred with respect to a present or former director, executive officer, or employee: (i) any bankruptcy petition filed by or against any business of which such person was a general partner or executive officer either at the time of the bankruptcy or within two years prior to that time; (ii) any conviction in a criminal proceeding or being subject to a pending criminal proceeding (excluding traffic violations and other minor offenses); (iii) being subject to any order, judgment or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction, permanently or temporarily enjoining, barring, suspending or otherwise limiting his or her involvement in any type of business, securities or banking activities; and (iv) being found by a court of competent jurisdiction (in a civil action), the SEC or the Commodities Futures Trading Commission to have violated a federal or state securities or commodities law, and the judgment has not been reversed, suspended or vacated.

Code of Business Conduct and Ethics

We have adopted a written code of business conduct and ethics that applies to our directors, officers, and employees, including our principal executive officer, principal financial and accounting officer, controller, or persons performing similar functions. Our code of business conduct and ethics is available under the Investors – Corporate Governance section of our website at www.onestopsystems.com. In addition, we post on our website all disclosures that are required by law or the listing standards of The Nasdaq Capital Market concerning any amendments to, or waivers from, any provision of the code. The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and should not consider it to be a part of this Annual Report.

Section 16(a) Beneficial Ownership Reporting Compliance

Under Section 16(a) of the Exchange Act, directors, executive officers, and beneficial owners of 10% or more of our common stock, or reporting persons, are required to report to the SEC on a timely basis the initiation of their status as a reporting person and any changes with respect to their beneficial ownership of our common stock. Based solely on our review of copies of such forms that we have received, or written representations from reporting persons, we believe that during the fiscal year ended December 31, 2022, all executive officers, directors and greater than 10% stockholders complied with all applicable filing requirements, other than (i) Gioia Messinger, who filed one late report, and (ii) Steve Cooper, who filed one late report. There were no known failures to file a required form.

ITEM 11. EXECUTIVE COMPENSATION.

This section discusses the material components of the executive compensation program for our executive officers who are named in the "Summary Compensation Table" below. In 2022, our "named executive officers" and their positions were as follows:

•David Raun, president and chief executive officer;

•Jim Ison, chief sales and marketing officer; and

•John W. Morrison Jr., chief financial officer, treasurer and secretary

As discussed elsewhere in this Annual Report, in February 2023, (i) we announced that Mr. Raun will step down from his role as chief executive officer of the Company at such time as his successor is appointed to such role, and (ii) Mr. Ison was appointed as chief product officer of the Company.

This discussion may contain forward-looking statements that are based on our current plans, considerations, expectations, and determinations regarding future compensation programs. Actual compensation programs that we adopt in the future may differ materially from the currently planned programs summarized in this discussion.

Summary Compensation Table

The following table provides information regarding the total compensation for services rendered in all capacities that was earned by each individual who served (i) as our principal executive officer at any time during 2022, and (ii) our two most highly compensated executive officers other than our principal executive officer who were serving as executive officers as of December 31, 2022. Officers were named officers for both 2022 and 2021.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($) (1)	All Other Compensation ($) (2)	Total ($)
David Raun	2022	$ 355,231	$ 293,360	$ 783,900	$ 27,166	$ 1,459,657
President and Chief Executive Officer	2021	$ 345,000	$ 77,625	$ -	$ 30,730	$ 453,355
Jim Ison [3]	2022	$ 283,039	$ 115,299	$ 220,080	$ 31,765	$ 650,182
Chief Sales and Marketing Officer	2021	$ 269,618	$ 55,939	$ 317,350	$ 33,980	$ 676,887
John W. Morrison Jr.	2022	$ 298,477	$ 172,108	$ 251,520	$ 31,648	$ 753,753
Chief Financial Officer	2021	$ 285,962	$ 95,675	$ 346,200	$ 33,415	$ 761,252

(1)Amounts reflect the full grant-date fair value of stock awards, consisting of restricted stock units, granted during the relevant fiscal year computed in accordance with ASC Topic 718, rather than the amounts paid to or realized by the named individual. We provide information regarding the assumptions used to calculate the value of all stock awards made to our officers in Note 10 to the audited consolidated financial statements for the year ended December 31, 2022, contained elsewhere in this Annual Report.

(2)Represents payment of health insurance premiums and 401(k) contributions.

(3)After the year ended December 31, 2022, in February 2023, Mr. Ison was appointed as chief product officer of the Company.

Narrative Disclosure to Compensation Tables

Employment Agreements

Executive Employment Agreement with David Raun

During the year ended December 31, 2022, Mr. Raun was entitled to a base salary of $358,800 per annum, subject to annual increases as determined by the compensation committee, and an annual bonus (paid out quarterly if targets are met) in the amount of 50% of his then annual base salary. The bonus is based on Mr. Raun's performance, as determined by the board of directors in its sole discretion, against fundamental corporate and/or individual objectives to be determined by the board of directors. Mr. Raun is eligible to participate in our 2017 Plan, subject to the discretion of the board of directors, if and when, the board of directors determines to make a grant to him.

Under the terms of the employment agreement with Mr. Raun, if we terminate his employment for other than good cause, or if Mr. Raun resigns for good reason, Mr. Raun is entitled to the following payments and benefits: (i) his fully earned but unpaid base salary through the date of termination at the rate then in effect, and any unreimbursed expenses incurred in accordance with Company policy; (ii) severance payments in an aggregate amount up to twelve months of Mr. Raun's then-current Base Salary (iii) the continuation of Mr. Raun's group health continuation coverage under the Consolidated Omnibus Budget Reconciliation Act of 1986 ("COBRA") at OSS' expense for a period of twelve months following the termination date, and (iv) unvested RSUs shall accelerate so that an additional twelve months of RSUs shall vest from the termination date. Mr. Raun must provide a release and waiver to OSS as a condition of receiving benefits (ii)-(iv) set forth in this paragraph.

Executive Employment Agreement with John Morrison

During the year ended December 31, 2022, Mr. Morrison was entitled to a base salary of $301,000 per annum, subject to annual increases as determined by the compensation committee, and a target quarterly bonus in the amount of 35% of his quarterly base salary. The target quarterly bonus is based on Mr. Morrison's performance, as determined by the board of directors in its sole discretion, against fundamental corporate and/or individual objectives to be determined by the board of directors. Mr. Morrison is eligible to participate in our 2017 Plan, subject to the discretion of the board of directors, if and when, the board of directors determines to make a grant to him. On March 16, 2023, Mr. Morrison's base salary for fiscal 2023 was increased to $310,648 and he was granted 94,000 RSUs, as approved by the compensation committee and our board of directors on such date.

Under the terms of the employment agreement with Mr. Morrison, if we terminate his employment without cause (as defined below) or he resigns for good reason (as defined below) at any time other than within three months immediately preceding or twelve months immediately following the effective date of a change in control (as defined below), he is entitled to the following payments and benefits: (i) his fully earned but unpaid base salary through the date of termination at the rate then in effect, plus all other amounts under any compensation plan or practice to which he is entitled; (ii) severance payments in an aggregate amount up to six months of Mr. Morrison's then-current Base Salary, paid to Mr. Morrison on OSS' regular paydays until the earlier of (a) the date that is six months following his termination or (b) the date as of which he commences employment with another employer, subject to standard payroll deductions and withholdings; (iii) a lump sum payment equal to Mr. Morrison's then-current target bonus; and (iv) the continuation of Mr. Morrison's group health continuation coverage under COBRA at OSS' expense for a period of six months following the termination date, *provided, however*, that in the event Mr. Morrison becomes eligible for comparable group insurance coverage in connection with new employment, such COBRA premium payments by OSS shall terminate immediately. Mr. Morrison must provide a release and waiver to OSS as a condition of receiving benefits (ii)-(v) set forth in this paragraph.

In the event Mr. Morrison's termination without cause or resignation for good reason occurs within the three months immediately preceding or twelve months immediately following a change in control, he is entitled to the following payments and benefits: (i) a single lump-sum payment in an amount equal to six months of Mr. Morrison's then-current base salary, subject to standard payroll deductions and withholdings, payable within ten business days of the date the release and waiver becomes effective; and (ii) provided that Mr. Morrison timely elects such coverage, the continuation of Mr. Morrison's group health continuation coverage under COBRA at OSS' expense for a period of six months following the termination date; provided, however, that in the event Mr. Morrison becomes eligible for comparable group insurance coverage in connection with new employment, such COBRA premium payments by OSS shall terminate immediately; and (ii) the vesting of the shares subject to each of Mr. Morrison's equity awards and stock options shall be accelerated such that one hundred percent (100%) of said shares shall be deemed fully-vested and, if applicable, immediately exercisable effective as of the date of such termination.

If Mr. Morrison's employment is terminated as a result of his death or following his permanent disability, Mr. Morrison or his estate, as applicable, is entitled to the following payments and benefits: (i) his fully earned but unpaid base salary through the date of termination at the rate then in effect, plus all other amounts under any compensation plan, expense reimbursement or practice to which he is entitled; and (ii) a lump sum cash payment in an amount equal to his "earned" bonus for the calendar quarter during which his date of termination occurs calculated as of the date of termination (wherein "earned" means that he has met the applicable bonus metrics as of date of such termination, as determined by the board of directors), prorated for such portion of the calendar quarter during which such termination occurs that has elapsed through the date of termination.

Executive Employment Agreement with Jim Ison

During the year ended December 31, 2022, Mr. Ison was entitled to a base salary of $286,000 per annum, subject to annual increases as determined by the compensation committee, and a target quarterly bonus in the amount of 25% of his quarterly base salary. The target quarterly bonus is based on Mr. Ison's performance, as determined by the board of directors in its sole discretion, against fundamental corporate and/or individual objectives to be determined by the board of directors. Mr. Ison is eligible to participate in our 2017 Plan, subject to the discretion of the board of directors if and when the board of directors determines to make a grant to him. On March 16, 2023, Mr. Ison's base salary for fiscal 2023 was increased to $294,580 and he was granted 76,000 RSUs, as approved by the compensation committee and our board of directors on such date.

Under the terms of the employment agreement with Mr. Ison, if we terminate his employment without cause (as defined below) or he resigns for good reason (as defined below) at any time other than within three months immediately preceding or twelve months immediately following the effective date of a change in control (as defined below), he is entitled to the following payments and benefits: (i) his fully earned but unpaid base salary through the date of termination at the rate then in effect, plus all other amounts under any compensation plan or practice to which he is entitled; (ii) severance payments in an aggregate amount up to six months of Mr. Ison's then-current base salary, paid to Mr. Ison on OSS' regular paydays until the earlier of (a) the date that is six months following his termination or (b) the date as of which he commences employment with another employer, subject to standard payroll deductions and withholdings; (ii) a lump sum payment equal to Mr. Ison's then-current target bonus; and (iv) the continuation of Mr. Ison's group health continuation coverage under COBRA at OSS' expense for a period of six months following the termination date; *provided, however*, that in the event Mr. Ison becomes eligible for comparable group insurance coverage in connection with new employment, such COBRA premium payments by OSS shall terminate immediately. Mr. Ison must provide a release and waiver to OSS as a condition of receiving benefits (ii)-(v) set forth in this paragraph.

In the event Mr. Ison's termination without cause or resignation for good reason occurs within the three months immediately preceding or twelve months immediately following a change in control, he is entitled to the following payments and benefits: (i) a single lump-sum payment in an amount equal to six months of Mr. Ison's then-current base salary, subject to standard payroll deductions and withholdings, payable within ten business days of the date the release and waiver becomes effective; and (ii) provided that Mr. Ison timely elects such coverage, the continuation of Mr. Ison's group health continuation coverage under COBRA at OSS' expense for a period of six months following the termination date; provided, however, that in the event Mr. Ison becomes eligible for comparable group insurance coverage in connection with new employment, such COBRA premium payments by OSS shall terminate immediately; and (ii) the vesting of the shares subject to each of Mr. Ison's equity awards and stock options shall be accelerated such that one hundred percent (100%) of said shares shall be deemed fully-vested and, if applicable, immediately exercisable effective as of the date of such termination.

If Mr. Ison's employment is terminated as a result of his death or following his permanent disability, Mr. Ison or his estate, as applicable, is entitled to the following payments and benefits: (i) his fully earned but unpaid base salary through the date of termination at the rate then in effect, plus all other amounts under any compensation plan, expense reimbursement or practice to which he is entitled; and (ii) a lump sum cash payment in an amount equal to his "earned" bonus for the calendar quarter during which his date of termination occurs calculated as of the date of termination (wherein "earned" means that he has met the applicable bonus metrics as of date of such termination, as determined by the board of directors), prorated for such portion of the calendar quarter during which such termination occurs that has elapsed through the date of termination.

Defined Terms Applicable to Executive Employment Agreements

For purposes of executive employment agreements, “change in control” shall mean:

(i) The direct or indirect sale or transfer, in a single transaction or a series of related transactions, by the stockholders of the Company of voting securities, in which the holders of the outstanding voting securities of the Company immediately prior to such transaction or series of transactions hold, as a result of holding Company securities prior to such transaction, in the aggregate, securities possessing less than fifty percent (50%) of the total combined voting power all outstanding voting securities of the Company or of the acquiring entity immediately after such transaction or series of related transactions;

(ii) A merger or consolidation in which the Company is not the surviving entity, except for a transaction in which the holders of the outstanding voting securities of the Company immediately prior to such merger or consolidation hold as a result of holding Company securities prior to such transaction, in the aggregate, securities possessing more than fifty percent (50%) of the total combined voting power of all outstanding voting securities of the surviving entity (or the parent of the surviving entity) immediately after such merger or consolidation;

(iii) A reverse merger in which the Company is the surviving entity but in which the holders of the outstanding voting securities of the Company immediately prior to such merger hold as a result of holding Company securities prior to such transaction, in the aggregate, securities possessing less than fifty percent (50%) of the total combined voting power of all outstanding voting securities of the Company or of the acquiring entity immediately after such merger;

(iv) The sale, transfer or other disposition (in one transaction or a series of related transactions) of all or substantially all of the assets of the Company, except for a transaction in which the holders of the outstanding voting securities of the Company immediately prior to such transaction(s) receive as a distribution with respect to securities of the Company, in the aggregate, securities possessing more than fifty percent (50%) of the total combined voting power of all outstanding voting securities of the acquiring entity immediately after such transaction(s); or

(v) Any time individuals who, on the date this Plan is adopted by the board of directors, are members of the board of directors (the “Incumbent Board”) cease for any reason to constitute at least a majority of the members of the input/output; *provided, however*, that if the appointment or election (or nomination for election) of any new board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member shall, for purposes of this Plan, be considered as a member of the incumbent board.

For purposes of the executive employment agreements, “cause” means as determined in the sole discretion of the board of directors following written notice of the condition(s) believed to constitute cause, which notice shall briefly describe such condition(s), one or more of the following condition(s): (i) Executive’s failure to substantially perform Executive’s job duties (other than any such failure resulting from Executive’s incapacity due to physical or mental illness or any such actual or anticipated failure after his issuance of written notice of the occurrence of an event alleged by Executive to constitute good reason); (ii) Executive’s failure to comply with all material applicable laws in performing Executive’s job duties or in directing the conduct of OSS’ business; (iii) Executive’s commission of any felony or intentionally fraudulent acts against OSS, its affiliates, executives, agents or customers; (iv) Executive’s participation in any activity that is directly competitive with or intentionally injurious to OSS or any of its affiliates or which violates the terms of Executive’s proprietary information and inventions agreement; (iv) Executive’s material breach of the terms of Executive’s proprietary information and inventions agreement; (v) Executive’s commission of any act of fraud, embezzlement or dishonesty against OSS or any of its affiliates, or use or intentional appropriation for Executive’s personal use or benefit of any funds or material properties of OSS or any of its affiliates not authorized by the board of directors to be so used or appropriated; (vi) Executive’s breach of any material provision of the employment agreement; and (vii) Executive’s gross negligence, insubordination or material violation of any duty of loyalty to OSS or any other demonstrable material misconduct on the part of Executive; provided, however, that, termination by OSS under subsections (i) or (vi) of this Section 3.8(c), shall only be deemed for “cause” pursuant to the foregoing definition if Executive fails to remedy such condition(s) within thirty (30) days following delivery of the notice of termination for cause.

For purposes of the executive employment agreements, “good reason” means the occurrence of any of the following events without Executive’s consent: (i) a material adverse change in Executive’s duties, authority or responsibilities relative to the duties, authority or responsibilities in effect immediately prior to such reduction, or, as it relates to Mr. Cooper, the removal of Executive as chief executive officer of OSS; provided, however, that a reduction in duties, position or responsibilities solely by virtue of OSS being acquired and made part of a larger entity (as, for example, when Executive retains a similar position with a subsidiary of the acquiring entity following a change in control, but Executive does not hold the same position in the acquiring entity) shall not constitute “good reason;” and, provided, further that Executive’s removal from the board of directors shall not constitute “good reason;” (ii) a material diminution in Executive’s base compensation; or (iii) a material breach by OSS of its obligations under this Agreement; provided, however, that, such termination by Executive shall only be deemed for “good reason” pursuant to the foregoing definition if: (A) Executive gives OSS written notice of Executive’s intent to terminate for good reason within sixty (60) days following the first occurrence of the condition(s) that Executive believes constitute(s) good reason, which notice shall describe such condition(s); (B) OSS fails to remedy such condition(s) within thirty (30) days following receipt of the written notice (the “Cure Period”); and (C) Executive voluntarily terminates Executive’s employment within sixty (60) days following the end of the Cure Period.

Annual Cash Bonus

For 2022 and 2021, Mr. Raun, Mr. Ison, and Mr. Morrison were eligible for bonuses. The executives’ bonuses for 2022 and 2021 were determined at the discretion of our board of directors based on its assessment of our corporate performance. Typically, a substantial portion of the bonus earned in a given year is paid at the beginning of the subsequent year after the review of the annual financial statements. Based on this assessment, Mr. Raun received cash bonuses of $293,360 and $77,625, representing 82.6% and 22.5% of his paid salary for 2022 and 2021, respectively. Mr. Ison received bonuses of $115,299 and $55,939, representing 40.7% and 20.8% of his paid salary for 2022 and 2021, respectively. Mr. Morrison received bonuses of $172,108 and $95,675, representing 57.7% and 33.5% of his paid salary for 2022 and 2021, respectively.

Equity Compensation

We primarily offer stock options and/or RSUs to our named executive officers as the long-term incentive component of our compensation program. Our stock options allow employees to purchase shares of our common stock at a price per share equal to the fair market value of our common stock on the date of grant and may or may not be intended to qualify as “incentive stock options” for U.S. federal income tax purposes. Prior to completion of our IPO, our board of directors determined the fair market value of our common stock based upon inputs including valuation reports prepared by third-party valuation firms from time to time. Since we completed our IPO, we have determined the fair market value of our common stock based on the closing price of our common stock on the Nasdaq Capital Market. Generally, the stock options we grant vest over three years, subject to the employee’s continued employment with us on the vesting date.

On June 24, 2020, the Company entered into an employment agreement with Mr. Raun to serve as the Company’s president and chief executive officer. Pursuant to the terms of the employment agreement, Mr. Raun was granted (i) 412,125 RSUs, which shall vest over three years, with one third of the RSUs vesting following the one-year anniversary of the date of grant, and the remaining RSUs vesting in four equal installments, commencing six months after the one-year anniversary of the date of grant and every six months thereafter until fully vested; and (ii) 412,125 Incentive Stock Options (“ISOs”) pursuant to the Company’s 2017 Equity Plan, which ISOs have and exercise price of $2.14 per share (the fair market value of the Company’s common stock at the date of grant). As of December 31, 2022, Mr. Raun’s ISOs were fully vested, but not exercised, based upon achievement of the specified performance objectives (discussed below).

The ISOs were subject to the following vesting conditions: the ISOs were schedule to vest at the end of each the second and fourth quarters based on the price of the Company’s common stock during the applicable period. The price of the Company’s common stock as of the end of quarter two or quarter four, as applicable, shall be determined using the ten-day trailing volume weighted average price (“VWAP”) after reporting of quarter two and quarter four earnings, as applicable. The date of each such determination shall be referred to as a “Determination Date.” If on any Determination Date the Company’s stock price has increased from the prior Determination Date, then a portion of the ISOs shall become vested. The number of ISOs that shall become vested on a Determinate Date is determined as follows: ((Price at Determination Date – Price at prior Determination Date) x 100) * 1,177.52 = Vested ISOs. If on any Determination Date the Company’s stock price is above $5.50 per share, all ISOs shall immediately become vested.

In the event, that Mr. Raun’s employment agreement is terminated for a reason other than “good cause” or for “good reason,” upon Mr. Raun’s execution of an effective waiver and release of claims, unvested RSUs shall accelerate so that an additional twelve months of RSUs shall vest from the termination date.

On March 17, 2022, Mr. Raun received an RSU grant of 201,000 shares of our common stock. The RSUs vest over a three year period beginning one year after the date of grant with equal semi-annual installments over a period of three years, subject to his continued employment with us on each vesting date.

On February 2, 2022, Mr. Ison received an RSU grant of 56,000 shares of our common stock. The RSUs vest over three year period beginning one year after the date of grant with equal semi-annual installments over a period of three years, subject to his continued employment with us on each vesting date.

On May 19, 2021, Mr. Ison received an RSU grant of 40,000 shares of common stock. The RSUs vest over a three year period beginning November 9, 2020, with equal semi-annual installments over a period of three years, subject to his continued employment with us on each vesting date.

On May 19, 2021, Mr. Ison received an RSU grant of 15,000 shares of our common stock. The RSUs vest over three year period beginning one year after the date of grant with equal semi-annual installments over a period of three years, subject to his continued employment with us on each vesting date.

On February 2, 2022, Mr. Morrison received an RSU grant of 64,000 shares of our common stock. The RSUs vest over three year period beginning one year after the date of grant with equal semi-annual installments over a period of three years, subject to his continued employment with us on each vesting date.

On May 19, 2021, Mr. Morrison received an RSU grant of 40,000 shares of common stock. The RSUs vest over a three year period beginning November 9, 2020, with equal semi-annual installments over a period of three years, subject to his continued employment with us on each vesting date.

On May 19, 2021, Mr. Morrison received an RSU grant of 20,000 shares of our common stock. The RSUs vest over three year period beginning one year after the date of grant with equal semi-annual installments over a period of three years, subject to his continued employment with us on each vesting date.

Stock awards granted to our named executive officers may be subject to accelerated vesting in certain circumstances. For additional discussion, please see “Employment Agreements” above and “Change in Control Benefits” below.

Prior to our initial public offering, we adopted our 2017 Plan, in order to facilitate the grant of cash and equity incentives to directors, employees (including our named executive officers) and consultants of our Company and certain of its affiliates to enable our company and certain of its affiliates to obtain and retain services of these individuals, which is essential to our long-term success. For additional information about the 2017 Plan, please see the section entitled “Incentive Award Plans” below.

Other Elements of Compensation

Retirement Plans

We have a 401(k) retirement plan. Under the terms of the plan, eligible employees may defer up to 20% of their pre-tax earnings, subject to the Internal Revenue Service annual contribution limit. Additionally, the plan allows for discretionary matching contributions by us. In 2022 and 2021, the matching contribution was 100% of the employee’s contribution up to a maximum of 5% of the employee’s annual compensation. However, matching contributions to the 401(k) plan were suspended in May 2020, as a component of the Company’s cost containment efforts and subsequent reinstated in April 2021.

Employee Benefits and Perquisites

Our named executive officers are eligible to participate in our health and welfare plans which include health, vision, dental, disability, flex-spending, life insurance and 401(k) plan.

Change in Control Benefits

Our named executive officers may become entitled to certain benefits or enhanced benefits in connection with a change in control of our company. Each of our named executive officers’ employment agreements entitles them to accelerated vesting of all outstanding equity awards, as well as certain other benefits, upon a change in control of our company. For additional discussion, please see “Employment Agreements” above.

Outstanding Equity Awards at Fiscal Year End

The following table summarizes the number of shares of common stock underlying outstanding equity incentive plan awards for each named executive officer as of December 31, 2022.

		Option Awards					Stock Awards			
Name	Grant Date	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Equity Incentive plan awards: Number of securities underlying unexercised unearned options (#)	Option Exercise Price ($)	Option expiration date	Number of shares or units of stock that have not vested (#)	Market value of shares of units of stock that have not vested ($)	Equity Incentive plan awards: Number of unearned shares, units or other rights that have not vested (#)	Equity Incentive plan awards: Market or payout value of unearned share, units or other right that have not vested ($)
David Raun	4/18/2017	10,000			$ 1.95	4/17/2027			-	
	6/24/2020	412,125			$ 2.14	6/23/2030			-	
	6/23/2020						68,688	$ 206,751	-	
	3/17/2022						201,000	$ 605,010	-	
Jim Ison	7/16/2014	32,848			$ 0.46	7/15/2024			-	
	4/2/2016	25,000			$ 1.08	4/1/2026			-	
	4/18/2017	20,000			$ 1.95	4/17/2027			-	
	2/10/2020						2,500	$ 7,525	-	
	5/19/2021						7,500	$ 22,575	-	
	5/19/2021						13,334	$ 40,135	-	
	2/3/2022						56,000	$ 168,560	-	
John W. Morrison Jr.	2/10/2020						2,500	$ 7,525	-	
	5/19/2021						10,000	$ 30,100	-	
	5/19/2021						13,334	$ 40,135	-	
	2/3/2022						64,000	$ 192,640	-	

Directors Compensation

The following table sets forth information for the year ended December 31, 2022, regarding the compensation awarded to, earned by, or paid to our non-employee directors who served on our board of directors during 2022.

Name	Fees earned or paid in cash ($)	Stock awards ($)	RSU awards ($)	Non-equity incentive plan compensation ($)	Nonqualified deferred compensation earnings ($)	All other compensation ($)	Total ($)
Ken Potashner	$ 47,840	$ -	$ 51,090	$ -	$ -	$ -	$ 98,930
Jack Harrison	$ 41,860	$ -	$ 51,090	$ -	$ -	$ -	$ 92,950
Kimberly Sentovich	$ 41,860	$ -	$ 51,090	$ -	$ -	$ -	$ 92,950
Sita Lowman	$ 35,880	$ -	$ 51,090	$ -	$ -	$ -	$ 86,970
Gioia Messinger	$ 35,880	$ -	$ 51,090	$ -	$ -	$ -	$ 86,970
Greg Matz	$ 41,860	$ -	$ 51,090	$ -	$ -	$ -	$ 92,950

On March 16, 2023, the RSU awards remuneration to our non-employee directors for the 2023 fiscal year was increased by 3.0%; directors will be entitled to $51,500 of RSUs per annum. Cash remuneration to our non-employee directors remains unchanged.

Additionally, in February 2023, our board of directors constituted a new committee of the board, the Strategic Transition Committee, to assist in the identification, transition and retention of a successor chief executive officer, including to work with the engaged search firm to accomplish the foregoing, to provide support to our management team throughout the transition, and to perform other duties as may be necessary or desirable from time to time in connection with the reorganization of the Company.

Members of the Strategic Transition Committee consist of Jack Harrison (chair of the committee), Gioia Messinger and Kenneth Potashner. As compensation for the services that they are expected to perform as members of the Strategic Transition Committee (i) Mr. Harrison and Ms. Messinger shall be entitled to receive $2,000 per month in cash, commencing

January 1, 2023 and continuing for so long as the Strategic Transition Committee remains in effect, which cash payments shall be paid to each of the relevant members in one lump sum at or about such time that the Strategic Transition Committee is disbanded, and (ii) Mr. Potashner shall be entitled to receive (A) 3,333 shares of Company common stock per month, commencing November 1, 2022 and continuing for so long as the Strategic Transition Committee remains in effect, which shares shall be issued to Mr. Potashner in one grant at or about such time that the Strategic Transition Committee is disbanded, and (B) a one-time cash payment equal to 30% of the total value of the shares issued to Mr. Potashner to cover taxes payable in connection with the issuance of such shares.

Stock Option Plans

2017 Equity Incentive Plan

Our board of directors adopted our 2017 Plan on October 10, 2017. Our 2017 Plan allows for the grant of a variety of equity vehicles to provide flexibility in implementing equity awards, including incentive stock options, non-qualified stock options, restricted stock grants, unrestricted stock grants and restricted stock units.

Amendments to 2017 Plan

On June 24, 2020, the Company amended the 2017 Plan to increase the maximum limitation of the number of shares of common stock with respect to one or more Stock Awards (as defined in the 2017 Plan) that may be granted to any one participant under the 2017 Plan during any calendar year from 500,000 shares to 1,000,000 shares. The amendment did not increase the total number of shares of common stock reserved under the 2017 Plan, and did not require stockholder approval.

On May 19, 2021, the Company's stockholders approved the Company's proposal to increase the number of shares authorized for issuance under the 2017 Plan from 1,500,000 shares to 3,000,000 shares of common stock of the Company pursuant to the terms and conditions of the 2017 Plan. The amendment took effect upon receipt of stockholder approval.

Authorized Shares. A total of 3,000,000 shares of common stock were authorized under the 2017 Plan.

Plan Administration. As permitted by the terms of the 2017 Plan, the board of directors has delegated administration of the 2017 Plan to the compensation committee. As used herein with respect to the 2017 Plan, the "Board of Directors" refers to any committee the board of directors appoints as well as to the board of directors itself. Subject to the provisions of the 2017 Plan, the board of directors has the power to construe and interpret the 2017 Plan and awards granted under it and to determine the persons to whom and the dates on which awards will be granted, the number of shares of common stock to be subject to each award, the time or times during the term of each award within which all or a portion of such award may be exercised, the exercise price, the type of consideration and other terms of the award. Subject to the limitations set forth below, the board of directors will also determine the exercise price of options granted under the 2017 Plan and, with the consent of any adversely affected option holder, may reduce the exercise price of any outstanding option, cancel an outstanding option in exchange for a new option covering the same or a different number of shares of common stock or another equity award or cash or other consideration, or any other action that is treated as a repricing under generally accepted accounting principles. All decisions, determinations, and interpretations by the board of directors regarding the 2017 Plan shall be final and binding on all participants or other persons claiming rights under the 2017 Plan or any award.

Options. Options granted under the 2017 Plan may become exercisable in cumulative increments ("vest") as determined by the board of directors. Such increments may be based on continued service to the Company over a certain period of time, the occurrence of certain performance milestones, or other criteria. Options granted under the 2017 Plan may be subject to different vesting terms. The board of directors has the power to accelerate the time during which an option may vest or be exercised. In addition, options granted under the 2017 Plan may permit exercise prior to vesting, but in such event the participant may be required to enter into an early exercise stock purchase agreement that allows the Company to repurchase unvested shares, generally at their exercise price, should the participant's service terminate before vesting. To the extent provided by the terms of an option, a participant may satisfy any federal, state or local tax withholding obligation relating to the exercise of such option by a cash payment upon exercise, by authorizing the Company to withhold a portion of the stock otherwise issuable to the participant, or by such other method as may be set forth in the option agreement. The maximum term of options under the 2017 Plan is 10 years, except that in certain cases the maximum term of certain incentive stock options is five years. Options under the 2017 Plan generally terminate three months after termination of the participant's service. Incentive stock options are not transferable except by will or by the laws of descent and distribution, provided that a participant may designate a beneficiary who may exercise an option following the participant's death. Non-statutory stock options are transferable to the extent provided in the option agreement.

Stock Bonuses and Restricted Stock Awards. Subject to certain limitations, the consideration, if any, for restricted stock unit awards must be at least the par value of our common stock. The consideration for a stock unit award may be payable in any form acceptable to the board of directors and permitted under applicable law. The board of directors may impose any restrictions or conditions upon the vesting of restricted stock unit awards, or that delay the delivery of the consideration after the vesting of stock unit awards, that it deems appropriate. Restricted stock unit awards are settled in shares of the Company's common stock. Dividend equivalents may be credited in respect of shares covered by a restricted stock unit award, as determined by the board of directors. At the discretion of the board of directors, such dividend equivalents may be converted into additional shares covered by the restricted stock unit award. If a restricted stock unit award recipient's service relationship with the Company terminates, any unvested portion of the restricted stock unit award is forfeited upon the recipient's termination of service.

Certain Adjustments. Transactions not involving receipt of consideration by the Company, such as a merger, consolidation, reorganization, recapitalization, reincorporation, reclassification, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, or a change in corporate structure may change the type(s), class(es) and number of shares of common stock subject to the 2017 Plan and outstanding awards. In that event, the 2017 Plan will be appropriately adjusted as to the type(s), class(es) and the maximum number of shares of common stock subject to the 2017 Plan and the Section 162(m) Limitation, and outstanding awards will be adjusted as to the type(s), class(es), number of shares and price per share of common stock subject to such awards.

2015 Stock Option Plan

Our board of directors adopted, and our stockholders approved, our 2015 Plan in December 2015. Our 2015 Plan allows for the grant of incentive stock options, within the meaning of Section 422 of the Code, to our employees and our parent and subsidiary corporations' employees, and for the grant of non-statutory stock options to our employees, directors and consultants and our parent and subsidiary corporations' employees, directors and consultants.

Authorized Shares. A total of 1,500,000 shares of common stock were authorized for grant under the 2015 Plan. Our 2015 Plan was terminated by the board of directors on October 10, 2017, and accordingly, no shares are available for issuance under the 2015 Plan. Our 2015 Plan will continue to govern outstanding awards granted thereunder.

Plan Administration. Our board of directors or a committee of our board (the administrator) administers our 2015 Plan. Subject to the provisions of the 2015 Plan, the administrator has the full authority and discretion to take any actions it deems necessary or advisable for the administration of the 2015 Plan. The administrator has the power to construe and interpret the terms of our 2015 Plan and awards granted under it, to prescribe, amend and rescind rules relating to our 2015 Plan, including rules and regulations relating to sub-plans, and to determine the terms and conditions of the awards, including the exercise price, the number of shares of our common stock subject to each such award, any vesting acceleration or waiver of forfeiture restrictions, and any restrictions or limitations regarding awards or the shares relating thereto. All decisions, interpretations and other actions of the administrator are final and binding on all participants in the 2015 Plan.

Options. Stock options may be granted under our 2015 Plan. The exercise price per share of all options must equal at least 100% of the fair market value per share of our common stock on the date of grant, as determined by the administrator. The term of a stock option may not exceed 10 years. With respect to any participant who owns 10% of the voting power of all classes of our outstanding stock as of the grant date, the term of an incentive stock option granted to such participant must not exceed five years and the exercise price per share of such incentive stock option must equal at least 110% of the fair market value per share of our common stock on the date of grant, as determined by the administrator.

After termination of an employee, director, or consultant, he or she may exercise his or her option for the period of time as specified in the applicable option agreement. If termination is due to death or disability, the option generally will remain exercisable for at least twelve months. In all other cases, the option will generally remain exercisable for at least 90 days. However, an option generally may not be exercised later than the expiration of its term.

Transferability of Options. Unless our administrator provides otherwise, our 2015 Plan generally does not allow for the transfer or assignment of options, except by will or by the laws of descent and distribution.

Certain Adjustments. In the event of certain changes in our capitalization, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the 2015 Plan, the administrator will adjust the number and class of shares that may be delivered under our 2015 Plan and/or the number, class and price of shares covered by each outstanding award.

2011 Stock Option Plan

Our board of directors adopted, and our stockholders approved, our 2011 Stock Option Plan in December 2011 (the "2011 Plan"). Our 2011 Plan allows for the grant of incentive stock options, within the meaning of Section 422 of the Code, to our employees and our parent and subsidiary corporations' employees, and for the grant of non-statutory stock options to our employees, directors and consultants and our parent and subsidiary corporations' employees, directors, and consultants.

Authorized Shares. A total of 1,500,000 shares of common stock were authorized for grant under the 2011 Plan. Our 2011 Plan was terminated by the board of directors on October 10, 2017, and accordingly, no shares are available for issuance under the 2011 Plan. Our 2011 Plan will continue to govern outstanding awards granted thereunder.

Plan Administration. Our board of directors administers our 2011 Plan. Subject to the provisions of the 2011 Plan, the board of directors has the full authority and discretion to take any actions it deems necessary or advisable for the administration of the 2011 Plan. The board of directors has the power to construe and interpret the terms of our 2011 Plan and awards granted under it, to prescribe, amend and rescind rules relating to our 2011 Plan, including rules and regulations relating to sub-plans, and to determine the terms and conditions of the awards, including the exercise price, the number of shares of our common stock subject to each such award, any vesting acceleration or waiver of forfeiture restrictions, and any restrictions or limitations regarding awards or the shares relating thereto. All decisions, interpretations and other actions of the board of directors are final and binding on all participants in the 2011 Plan.

Options. Stock options may be granted under our 2011 Plan. The exercise price per share of all options must equal at least 100% of the fair market value per share of our common stock on the date of grant, as determined by the board of directors. The term of a stock option may not exceed 10 years. With respect to any participant who owns 10% of the voting power of all classes of our outstanding stock as of the grant date, the term of an incentive stock option granted to such participant must not exceed five years and the exercise price per share of such incentive stock option must equal at least 110% of the fair market value per share of our common stock on the date of grant, as determined by the board of directors.

After termination of an employee, director, or consultant, he or she may exercise his or her option for the period of time as specified in the applicable option agreement. If termination is due to death or disability, the option generally will remain exercisable for at least twelve months. In all other cases, the option will generally remain exercisable for at least 90 days. However, an option generally may not be exercised later than the expiration of its term.

Transferability of Options. Unless our board of directors provides otherwise, our 2011 Plan generally does not allow for the transfer or assignment of options, except by will or by the laws of descent and distribution. Notwithstanding the foregoing, to the extent permitted by the board of directors, in its discretion, a non-statutory option shall be assignable or transferable subject to the applicable limitations, if any, described in Rule 701 under the Securities Act.

Certain Adjustments. In the event of certain changes in our capitalization, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the 2011 Plan, the board of directors will adjust the number and class of shares that may be delivered under our 2011 Plan and/or the number, class and price of shares covered by each outstanding award.

S-8 Registration Statement:

On June 21, 2021, the Company filed a Form S-8 Registration Statement relating to 3,543,114 shares of the Company's common stock, par value $0.0001 per share, issuable to the employees, officers, directors, consultants and advisors of the Company under the Company's 2017 Plan, 2015 Plan, and 2011 Plan.

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

The following table sets forth information regarding beneficial ownership of our common stock, as of February 28, 2023, by:

•each person, or group of affiliated persons, known by us to be the beneficial owner of more than 5% of our common stock;

•each of our named executive officers;

•each of our directors; and,

•all of our executive officers and directors as a group.

We have determined beneficial ownership in accordance with SEC rules. The information does not necessarily indicate beneficial ownership for any other purpose. Under these rules, the number of shares of common stock deemed outstanding includes shares issuable upon exercise of stock options or warrants held by the respective person or group that may be exercised or converted within 60 days after February 28, 2023. For purposes of calculating each person's or group's percentage ownership, stock options and warrants exercisable within 60 days after February 28, 2023, are included for that person or group but not for any other person or group.

Applicable percentage ownership is based on 20,343,071 shares of common stock outstanding on February 28, 2023.

Unless otherwise indicated and subject to applicable community property laws, to our knowledge, each stockholder named in the following table possesses sole voting and investment power over the shares listed. Unless otherwise noted below, the address of each person listed on the table is c/o One Stop Systems, Inc., 2235 Enterprise Street, #110, Escondido, CA 92029.

Name and Address of Beneficial Owner	Number of Shares of Common Stock Beneficially Owned	Percent of Common Stock Beneficially Owned
5% or greater stockholders:		
Steve Cooper [11]	2,536,794	12.5%
Lynrock Lake [12]	1,782,528	8.8%
Bard & Associates, Inc. [13]	1,045,333	5.1%
Named Executive Officer and Directors:		
David Raun [1]	747,966	3.6%
Ken Potashner [2]	381,336	1.9%
Jack Harrison [3]	81,984	*
Kimberly Sentovich [4]	39,266	*
Sita Lowman [5]	29,930	*
Gioia Messinger [6]	28,690	*
Greg Matz [7]	30,430	*
Jim Ison [8]	206,615	1.0%
John Morrison [9]	113,816	*
All executive officers and directors as a group (9 persons) [10]	1,660,033	7.9%

* Less than 1%.

(1)Consists of (i) 311,888 shares of common stock held by Mr. Raun; (ii) 422,125 shares of common stock Mr. Raun has the right to acquire from us within 60 days of February 28, 2023, pursuant to the exercise of stock options, (iii) 13,953 shares of common stock that Mr. Raun has the right to exercise within 60 days of February 28, 2023, pursuant to common stock warrants. Mr. Raun is our president and chief executive officer.

(2)Consists of (i) 263,479 shares of common stock held by Mr. Potashner; (ii) 47,857 shares of common stock that Kenco, Inc. has the right to exercise within 60 days of February 28, 2023 (pursuant to common stock warrants), (iii) 70,000 shares of common stock that Mr. Potashner has the right to acquire from us within 60 days of February 28, 2023, pursuant to the exercise of stock options. Mr. Potashner has sole voting and investment control over Kenco, Inc. Mr. Potashner is the chairman of the board of directors.

(3)Consists of (i) 71,984 shares of common stock held by Mr. Harrison, and (ii) 10,000 shares of common stock that Mr. Harrison has the right to acquire from us within 60 days of February 28, 2023, pursuant to the exercise of stock options. Mr. Harrison is a member of the board of directors.

(4)Consists of 39,266 shares of common stock held by Ms. Sentovich. Ms. Sentovich is a member of the board of directors,

(5)Consists of 29,930 shares of common stock held by Ms. Lowman. Ms. Lowman is a member of the board of directors.

(6)Consists of 28,690 shares of common stock held by Ms. Messinger. Ms. Messinger is a member of the board of directors.

(7)Consists of 30,430 shares of common stock held by Mr. Matz. Mr. Matz is a member of the board of directors.

(8)Consists of (i) 128,767 shares of common stock held by Mr. Ison, and (ii) 77,848 shares of common stock, issuable pursuant to the exercise of stock options that Mr. Ison has the right to acquire from us within 60 days of February 28, 2023. Mr. Ison is the chief product officer and sales and marketing officer of the Company.

(9)Consists of (i) 113,816 shares of common stock held by Mr. Morrison. Mr. Morrison is the chief financial officer of the Company.

(10)Includes (i) 1,018,250 shares beneficially owned by our current named executive officers and directors, and (ii) 641,783 shares subject to options, warrants or convertible securities, that are either exercisable or such person has a right to receive within 60 days of February 28, 2023, as set forth in the foregoing footnotes.

(11)Consists of 2,536,794 shares of common stock held by The Cooper Revocable Trust dated April 25, 2001. Mr. Cooper shares joint voting and investment control of The Cooper Revocable Trust dated April 25, 2001, with his wife Lori Cooper. The share information is based on information provided by Mr. Cooper in that Form 4 filed with the SEC on December 20, 2022. Mr. Cooper served as our chief executive officer and president until February 15, 2020.

(12)Based on information provided by Lynrock Lake on Schedule 13G/A, filed with the SEC on February 14, 2023.

(13)Based on information provided by Bard & Associates, Inc on Schedule 13G/A, filed with the SEC on February 6, 2023.

Equity Compensation Plan Information:

The following table provides information as of December 31, 2022, regarding our equity compensation plans:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights		Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
2017 Stock Option Plan	1,467,228	$	0.94	429,911
2015 Stock Option Plan	334,611	$	1.77	-
2011 Stock Option Plan	72,848	$	0.46	-
Warrants	451,112	$	5.37	-

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

We describe below the transactions and series of similar transactions, since January 1, 2021, to which we were a party or will be a party, in which:

- the amounts involved exceeded or will exceed $120,000; and
- any of our directors, executive officers, holders of more than 5% of our capital stock or any member of their immediate family had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements with directors and executive officers, which are described where required under the section above titled "Executive Compensation."

Executive Compensation and Employment Arrangements

Please see "Item 11 Executive Compensation" for information on compensation arrangements with our executive officers and agreements with our executive officers containing compensation and termination provisions, among others.

Director and Officer Indemnification and Insurance

We have entered into indemnification agreements with each of our directors and executive officers, and we maintain directors' and officers' liability insurance. These agreements, among other things, require us to indemnify each director and executive officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys' fees, judgments, fines and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person's services as a director or executive officer.

Our certificate of incorporation and our amended and restated bylaws provide that we will indemnify each of our directors and officers to the fullest extent permitted by the Delaware General Corporation Law. Further, we have entered into indemnification agreements with each of our directors and officers, and we have purchased a policy of directors' and officers' liability insurance that insures our directors and officers against the cost of defense, settlement, or payment of a judgment under certain circumstances.

Board Committees and Independence

Our board of directors has established three standing committees – audit and risk, compensation, and nominating and corporate governance – each of which operates under a charter that has been approved by our board of directors. Additionally, in February 2023, our board of directors constituted a new committee of the board, the strategic transition committee.

Policies and Procedures Regarding Related Party Transactions

Our board of directors has adopted a written related person transaction policy setting forth the policies and procedures for the review and approval or ratification of related-person transactions. This policy covers, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act, any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships in which we were or are to be a participant, where the amount involved exceeds $120,000 and a related person had or will have a direct or indirect material interest, including, without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related person. In reviewing and approving any such transactions, our audit and risk committee is tasked to consider all relevant facts and circumstances, including, but not limited to, whether the transaction is on terms comparable to those that could be obtained in an arm's length transaction and the extent of the related person's interest in the transaction.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The audit and risk committee of our board of directors has selected Haskell & White LLP ("H&W") as our independent registered public accounting firm for the fiscal year ended December 31, 2022. H&W audited our consolidated financial statements for the years ended December 31, 2022 and 2021.

Principal Accountant Fees and Services

The aggregate fees for professional services rendered to us by H&W, our independent registered public accounting firm which performed our audits for the years ended December 31, 2022 and 2021, and for other services were as follows:

	For the Year Ended December 31,	
	2022	2021
Audit fees [1]	$ 220,100	$ 194,250
Audit-Related fees [2]	-	3,100
Tax fees	-	-
Other fees	-	-
Total fees	$ 220,100	$ 197,350

(1)Includes fees for (i) audits of our consolidated financial statements for the fiscal years ended December 31, 2022 and 2021, and (ii) reviews of our interim period financial statements for fiscal year 2022 and 2021.

(2)Preparation of a consent dated June 21, 2021.

Pre-Approval Policies and Procedures

Our audit and risk committee pre-approves all auditing services and the terms of non-audit services provided by our independent registered public accounting firm, but only to the extent that the non-audit services are not prohibited under applicable law and the committee determines that the non-audit services do not impair the independence of the independent registered public accounting firm.

In situations where it is impractical to wait until the next regularly scheduled quarterly meeting, the chairman of the committee has been delegated authority to approve audit and non-audit services to be provided by our independent registered public accounting firm. Fees payable to our independent registered public accounting firm for any specific, individual service approved by the chairman pursuant to the above-described delegation of authority may not exceed $25,000, and the chairman is required to report any such approvals to the full committee at its next scheduled meeting. In addition, our audit and risk committee has pre-approved a list of acceptable services and fees payable to H&W in an aggregate amount of up to $12,500 per quarter for such services, including without limitation audit and allowable non-audit and tax consulting. This pre-approval is for small projects needing quick reaction and judged by our audit and risk committee not to raise any independence issues with H&W. Such projects and fees are required to be presented in detail at the next audit and risk committee meeting. Fees that were incurred in 2022 and 2021were pre-approved by our audit and risk committee.

Our audit and risk committee has considered and determined that the provision of the non-audit services described is compatible with maintaining the independence of our registered public accounting firm.

PART IV

ITEM 15. EXHIBIT AND FINANCIAL STATEMENT SCHEDULES.

1.Financial Statements.

The financial statements of One Stop Systems, Inc., together with the report thereon of Haskell & White LLP, an independent registered public accounting firm, are included in this Annual Report on Form 10-K.

2.Financial Statement Schedules.

All schedules are omitted because they are not applicable, or the required information is shown in the financial statements or notes thereto.

3.Exhibits

A list of exhibits is set forth on the Exhibit Index immediately preceding the signature page of this Annual Report on Form 10-K and is incorporated herein by reference.

ITEM 16. FORM 10-K SUMMARY.

Not applicable.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
One Stop Systems, Inc.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of One Stop Systems, Inc. (the “Company”) as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive (loss) income, stockholders’ equity, and cash flows for each of the years then ended, and the related notes (collectively, the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2022 and 2021, and the consolidated results of its operations and its cash flows for each of the years then ended, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated 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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Haskell & White LLP
HASKELL & WHITE LLP

We have served as the Company’s auditor since 2017.

Irvine, California
March 23, 2023

ONE STOP SYSTEMS, INC. (OSS)

CONSOLIDATED BALANCE SHEETS

		December 31, 2022		December 31, 2021
ASSETS				
Current assets				
Cash and cash equivalents	$	3,112,196	$	5,101,174
Short-term investments (Note 3)		10,123,535		14,535,750
Accounts receivable, net (Note 4)		11,327,244		5,089,804
Inventories, net (Note 5)		20,775,366		12,277,873
Prepaid expenses and other current assets		502,156		580,651
Total current assets		45,840,497		37,585,252
Property and equipment, net (Note 6)		2,570,124		3,091,415
Operating lease right-of use assets		731,043		-
Deposits and other		60,243		46,845
Deferred tax assets, net		-		3,641,032
Goodwill		7,120,510		7,120,510
Intangible assets, net (Note 7)		42,154		105,385
Total Assets	$	56,364,571	$	51,590,439
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
Accounts payable	$	4,592,713	$	2,059,059
Accrued expenses and other liabilities (Note 8)		3,013,869		3,846,488
Current portion of operating lease obligation (Note 12)		536,588		-
Current portion of notes payable (Note 9)		2,952,447		1,137,651
Current portion of senior secured convertible note, net of debt discounts of $0 and $2,384 (Note 9)		-		2,588,525
Total current liabilities		11,095,617		9,631,723
Long-term debt, net of current portion (Note 9)		409,294		-
Deferred tax liability, net		138,662		-
Operating lease obligation, net of current portion (Note 12 & 13)		397,249		-
Total liabilities		12,040,822		9,631,723
Commitments and contingencies (Note 12)				
Stockholders' equity				
Common stock, $.0001 par value; 50,000,000 shares authorized; 20,084,528 and 18,772,214 shares issued and outstanding, respectively		2,008		1,877
Additional paid-in capital		45,513,807		41,232,441
Accumulated other comprehensive income		510,485		153,361
Accumulated (deficit) earnings		(1,702,551)		571,037
Total stockholders' equity		44,323,749		41,958,716
Total Liabilities and Stockholders' Equity	$	56,364,571	$	51,590,439

See accompanying notes to consolidated financial statements.

ONE STOP SYSTEMS, INC. (OSS)

CONSOLIDATED STATEMENTS OF OPERATIONS

`

	For the Year Ended December 31, 2022	2021
Revenue	$ 72,421,345	$ 61,982,104
Cost of revenue	52,023,736	42,342,815
Gross profit	20,397,609	19,639,289
Operating expenses:		
General and administrative	7,279,401	7,658,418
Marketing and selling	6,806,306	6,201,228
Research and development	4,743,574	4,032,616
Total operating expenses	18,829,281	17,892,262
Income from operations	1,568,328	1,747,027
Other income (expense):		
Interest income	237,751	244,382
Interest expense	(162,391)	(527,139)
Gain on forgiveness of Paycheck Protection Program (PPP) loan and interest	-	1,514,354
Other income (expense), net	550,854	(40,176)
Total other income (expense), net	626,214	1,191,421
Income before income taxes	2,194,542	2,938,448
Provision for income taxes	4,423,597	605,675
Net (loss) income	$ (2,229,055)	$ 2,332,773
Net (loss) income per share:		
Basic	$ (0.11)	$ 0.13
Diluted	$ (0.11)	$ 0.12
Weighted average common shares outstanding:		
Basic	19,730,698	18,305,878
Diluted	19,730,698	19,503,737

See accompanying notes to consolidated financial statements.

ONE STOP SYSTEMS, INC. (OSS)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME

	For the Year Ended December 31, 2022	2021
Net (loss) income	$ (2,229,055)	$ 2,332,773
Other comprehensive income (loss):		
Net unrealized income (loss) on short-term investments	26,015	(11,060)
Currency translation adjustment	331,109	(123,126)
Total other comprehensive income (loss)	357,124	(134,186)
Comprehensive (loss) income	$ (1,871,931)	$ 2,198,587

See accompanying notes to consolidated financial statements.

ONE STOP SYSTEMS, INC. (OSS)
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
For the Year Ended December 31, 2022

	Common Stock Shares		Common Stock Amount		Additional Paid-in-Capital		Accumulated Other Comprehensive income		Accumulated Earnings (deficit)		Total Stockholders' Equity
Balance, January 1, 2022	18,772,214	$	1,877	$	41,232,441	$	153,361	$	571,037	$	41,958,716
Adjustment to beginning accumulated earnings for adoption of lease accounting (ASC842)	-		-		-		-		(44,533)		(44,533)
Adjusted beginning balance, January 1, 2022	18,772,214	$	1,877	$	41,232,441	$	153,361	$	526,504	$	41,914,183
Stock-based compensation	-		-		1,991,117		-		-		1,991,117
Exercise of stock options, RSUs and warrants	275,949		27		42,135		-		-		42,162
Taxes paid on net issuance of employee stock options	-		-		(342,691)		-		-		(342,691)
Conversion of senior secured convertible debt to equity	1,036,365		104		2,590,805		-		-		2,590,909
Currency translation adjustment	-		-		-		331,109		-		331,109
Net unrealized gain on short-term investments	-		-		-		26,015		-		26,015
Net loss	-		-		-		-		(2,229,055)		(2,229,055)
Balance, December 31, 2022	20,084,528	$	2,008	$	45,513,807	$	510,485	$	(1,702,551)	$	44,323,749

See accompanying notes to consolidated financial statements.

ONE STOP SYSTEMS, INC. (OSS)
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY - CONTINUED
For the Year Ended December 31, 2021

	Common Stock Shares		Common Stock Amount		Additional Paid-in-Capital		Accumulated Other Comprehensive income		Accumulated Earnings / Deficit		Total Stockholders' Equity
Balance, January 1, 2021	16,684,424	$	1,668	$	30,758,354	$	287,547	$	(1,761,736)	$	29,285,833
Stock-based compensation	-		-		1,695,105		-		-		1,695,105
Exercise of stock options, RSUs and warrants	590,784		59		401,838		-		-		401,897
Proceeds from issuance of stock, net of issuance costs of $811,327	1,497,006		150		9,188,523		-		-		9,188,673
Taxes paid on net issuance of employee stock options	-		-		(811,379)		-		-		(811,379)
Currency translation adjustment	-		-		-		(123,126)		-		(123,126)
Net unrealized loss on short-term investments	-		-		-		(11,060)		-		(11,060)
Net income	-		-		-		-		2,332,773		2,332,773
Balance, December 31, 2021	18,772,214	$	1,877	$	41,232,441	$	153,361	$	571,037	$	41,958,716

See accompanying notes to consolidated financial statements.

ONE STOP SYSTEMS, INC. (OSS)
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Year Ended December 31, 2022	2021
Cash flows from operating activities:		
Net (loss) income	$ (2,229,055)	$ 2,332,773
Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities:		
Deferred benefit (provision) for income taxes	3,781,704	(63,578)
Loss on disposal of property and equipment	54,377	80,846
Provision (recovery) for bad debt	29,154	(17,013)
Warranty reserves	33,796	173,262
Amortization of intangibles	63,231	556,873
Depreciation	987,068	923,735
Inventory reserves	798,789	486,559
Amortization of debt discount	1,224	146,294
Stock-based compensation expense	1,991,117	1,695,105
Gain on forgiveness of Paycheck Protection Program (PPP) loan and interest	-	(1,514,354)
Changes in operating assets and liabilities:		
Accounts receivable	(6,253,003)	2,327,470
Inventories	(9,547,390)	(3,456,394)
Prepaid expenses and other current assets	38,080	243,437
Accounts payable	2,515,000	1,083,954
Accrued expenses and other liabilities	(70,117)	623,627
Net cash (used in) provided by operating activities	(7,806,025)	5,622,596
Cash flows from investing activities:		
Redemption of short-term investment grade securities	4,313,231	-
Proceeds from sales of intangible assets	125,000	-
Purchases of property and equipment, including capitalization of labor costs for test equipment and ERP	(529,908)	(563,815)
Investment in short-term investment grade securities	-	(14,546,810)
Net cash provided by (used in) investing activities	3,908,323	(15,110,625)
Cash flows from financing activities:		
Proceeds from exercise of stock options and warrants	42,162	401,897
Payment of payroll taxes on net issuance of employee stock options	(342,691)	(811,379)
Proceeds from notes payable	2,500,000	2,307,818
Repayments on notes payable	(252,918)	(2,449,628)
Proceeds from issuance of stock	-	10,000,000
Stock issuance costs	-	(811,327)
Repayments on related-party notes payable	-	(206,669)
Net cash provided by financing activities	1,946,553	8,430,712
Net change in cash and cash equivalents	(1,951,149)	(1,057,317)
Effect of exchange rates on cash	(37,829)	(158,430)
Cash and cash equivalents, beginning of year	5,101,174	6,316,921
Cash and cash equivalents, end of year	$ 3,112,196	$ 5,101,174

See accompanying notes to consolidated financial statements.

ONE STOP SYSTEMS, INC. (OSS)
CONSOLIDATED STATEMENTS OF CASH FLOWS - CONTINUED

	For the Year Ended December 31,	
	2022	2021
Supplemental disclosure of cash flow information:		
Cash paid during the year for interest	$ 54,403	$ 120,434
Cash paid during the year for income taxes	$ 107,061	$ 174,656
Supplemental disclosure of non-cash transactions:		
Right of use assets recorded upon adoption of ASC 842	$ 1,203,580	$ -
Lease Liabilities recorded upon adoption of ASC 842	$ 1,477,419	$ -
Conversion of senior secured convertible debt to common stock	$ 2,590,909	$ -
Reclassification of inventories to property and equipment	$ 143,492	$ 194,013

See accompanying notes to consolidated financial statements.

NOTE 1 – THE COMPANY AND BASIS OF PRESENTATION

Nature of Operations

One Stop Systems, Inc. ("we," "our," "OSS," or the "Company") was originally incorporated as a California corporation in 1999, after initially being formed as a California limited liability company in 1998. On December 14, 2017, the Company was reincorporated as a Delaware corporation in connection with its initial public offering. The Company designs, manufactures, and markets specialized high-performance compute and storage hardware, software, and systems, which are designed to target edge artificial intelligence ("AI") Transportable deployments. The Company markets its products to manufacturers of automated equipment used for autonomous vehicle, medical, industrial, and military applications, with special focus on platforms that move, such as trucks, planes, and mobile datacenters.

During the year ended December 31, 2015, the Company formed a wholly owned subsidiary in Germany, One Stop Systems, GmbH ("OSS GmbH"). In July 2016, the Company acquired Mission Technologies Group, Inc. ("Magma") and its operations.

On August 31, 2018, the Company acquired Concept Development Inc. ("CDI") located in Irvine, California. CDI specialized in the design and manufacture of custom high-performance computing systems for airborne in-flight entertainment, flight safety equipment, and networking systems. CDI's was fully integrated into the core operations of the Company as of June 1, 2020.

On October 31, 2018, OSS GmbH acquired 100% of the outstanding stock of Bressner Technology GmbH, a limited liability company registered under the laws of Germany and located near Munich, Germany ("OSS Europe"). OSS Europe designs and manufactures standard and customized servers, panel PCs, and PCIe accelerator systems. Although, currently, OSS Europe primarily serves as a value-added reseller for the Company in Europe, we are also focused on growing the AI Transportable portion of our business through Bressner and leveraging its existing relationships. OSS Europe also provides manufacturing, test, sales, and marketing services for customers throughout Europe, the Middle East and Africa.

The negative impact of the COVID-19 pandemic and the impact on the global economy and capital markets resulting from the geopolitical instability caused in part by the ongoing military conflict between Russia and Ukraine, including inflation and Federal Reserve interest rate increases, have contributed to global supply chain issues and economic uncertainty, which has negatively affected our operations. Additionally, during the fourth quarter of 2022, the general consensus among economists continued to suggest that we should expect a higher recession risk to continue for the foreseeable future, which could result in further economic uncertainty and volatility in the capital markets in the near term and could negatively affect our operations.

Additionally, in March 2023, Silicon Valley Bank and Signature Bank were closed and taken over by the FDIC, which created significant market disruption and uncertainty for those who bank with those institutions, and which raised significant concern regarding the stability of the banking system in the United States, and in particular with respect to regional banks. If other banks and financial institutions enter receivership or become insolvent in the future in response to financial conditions affecting the banking system and financial markets, our ability to access our cash and cash equivalents may be threatened and such events could have a material adverse effect on our business and financial condition.

With respect to our media and entertainment business, we are seeing an acceleration in our customer's investment in cloud technology and a drive towards less intelligent compute capability at the edge to reduce the costs of their componentry. This is particularly true of their virtual products, which do not require the same level of ruggedization as this system is not typically operated in harsh environments and for which software is being developed to eventually provide a real-time cloud solution. As a result, we expect that our customer will transition to a lower cost, commodity type equipment solution. We anticipate that we will begin to experience a decrease in the demand for our high-compute, ruggedized media and entertainment focused equipment and our expertise in this area in the first half of 2023.

Currently, we are experiencing increased pricing, longer lead-times, unavailability of product and limited supplies, protracted delivery dates, changes in minimum order quantities to secure product, and/or shortages of certain parts and supplies that are necessary components for the products and services we offer to our customers. As a result, the Company is carrying increased inventory balances to ensure availability of necessary products and to secure pricing.

These global issues and concerns regarding general economic decline or recession are also impacting some of our customers, who are experiencing downturns or uncertainty in their own business operations and revenue, and as a result, these customers may need to decrease or delay their technology spending, request pricing concessions or payment extensions, or seek to renegotiate their contracts.

As a result of these global issues, as well as other factors discussed in this Annual Report, it has been difficult to accurately forecast our revenues or financial results, especially given the near and long-term impacts of the pandemic, geopolitical issues, inflation, the Federal Reserve interest rate increases and the potential for a recession. In addition, while the potential impact and duration of these issues on the economy and our business may be difficult to assess or predict, these world events have resulted in, and may continue to result in, significant disruption of global financial markets, and may reduce our ability to access additional capital, which could negatively affect our liquidity in the future. Our results of operations could be materially below our forecasts as well, which could adversely affect our results of operations, disappoint analysts and investors, or cause our stock price to decline.

Furthermore, a decrease in orders in a given period, including in connection with our media and entertainment customer's transition to the cloud, could negatively affect our revenues in future periods. These global issues and events may also have the effect of heightening many risks associated with our customers and supply chain. We may take further actions that alter our operations as may be required by federal, state, or local authorities from time to time, or which we determine are in our best interests. In addition, we may decide to postpone or abandon planned investments in our business in response to changes in our business, which may impact our ability to attract and retain customers and our rate of innovation, either of which could harm our business.

Management's plans with respect to the above are to continue their efforts towards responding to the changing economic landscape, to continue to control costs, conserve cash, strengthen margins through the introduction of new product lines focusing on artificial intelligence compute capabilities for military and industrial applications, autonomous truck diving and improve company-wide execution.

Basis of Presentation

The accompanying financial statements have been prepared on an accrual basis of accounting in accordance with United States Generally Accepted Accounting Principles ("U.S. GAAP"), as set forth in the Financial Accounting Standards Board's ("FASB") Accounting Standards Codification ("ASC").

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of OSS, which include the acquisition of CDI, and its wholly owned subsidiary, OSS GmbH, which also includes the acquisition of OSS Europe. Intercompany balances and transactions have been eliminated in consolidation.

NOTE 2 – SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent liabilities at the date of the consolidated financial statements, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from these estimates and assumptions.

On an ongoing basis, our management evaluates these estimates and assumptions, including those related to determination of standalone selling prices of our products and services, allowance for doubtful account and sales reserves, income tax valuations, stock-based compensation, goodwill, intangible assets and inventory valuations and recoverability. We base our estimates on historical data and experience, as well as various other factors that our management believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities.

Due to the COVID-19 pandemic, Ukraine war, inflationary pressures, other macroeconomic factors and reduced revenue opportunities with our largest customer there has been uncertainty and disruption in the global economy, financial markets and our ongoing operations. We are not aware of any specific event or circumstance that would require an update to our estimates or assumptions or a revision of the carrying value of our assets or liabilities that has not been properly reflected in the consolidated financial statements. These estimates and assumptions may change as new events occur and additional information is obtained. As a result, actual results could differ materially from these estimates and assumptions.

Concentration Risks

At times, deposits held with financial institutions may exceed the amount of insurance provided by the Federal Deposit Insurance Corporation (“FDIC”) and Securities Investor Protection Corporation (“SIPC”), of which both provide basic deposit coverage with limits up to $250,000 per owner. As of December 31, 2022, the Company had $2,378,546 of cash in our accounts that exceeded the insurance limits. The Company has not experienced any such losses in these accounts, and believes that the financial institutions at which such amounts are held are stable; however, no assurances can be provided. In Germany, the deposit insurance is €100,000 per bank, per customer. OSS Europe has funds on deposit in both Euro and U.S. dollar denominations of €145,599 (US$156,261) with banks in excess of the insurance limits.

In the years ended December 31, 2022 and 2021, approximately 26%, representing one customer and 36%, representing two customers, respectively, of net sales represent customers which are each greater than 10% of our consolidated annual revenue.

As of December 31, 2022 and 2021, approximately 49% and 56%, respectively, of net trade accounts receivables represent two customer balances which are each greater than 10% of our consolidated trade accounts receivable balance.

The Company made purchases from a certain supplier which represented greater than 10% of the Company’s vendor purchases on an annual basis. This vendor represented approximately 25% and 12.6% of purchases for the years ended December 31, 2022, and 2021, respectively.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on deposit and money market accounts. The Company considers all highly liquid temporary cash investments with an initial maturity of three months or less when acquired to be cash equivalents. Management believes that the carrying amounts of cash equivalents approximate their fair value because of the short maturity period.

Short-term Investments

Short-term investments consist predominantly of commercial paper, corporate debt securities, U.S. Treasury securities, and asset-backed securities. The Company classifies short-term investments based on the facts and circumstances surrounding the investments at the time of purchase and evaluates such classification as of each balance sheet date. On December 31, 2022, all short-term investments were classified as available-for-sale.

Short-term investments are recorded at fair value with unrealized gains and losses included in accumulated other comprehensive income - a component of stockholders’ equity. Realized gains and losses are determined using the specific identification method and are included in other income (expense) in the consolidated statement of operations. The Company evaluates its investments to determine whether those with unrealized loss positions are other than temporarily impaired. Impairments are considered to be other than temporary if they are related to deterioration in credit risk or if it is likely that the Company will sell the securities before recovery of their cost basis.

Accounts Receivable

Accounts receivables are presented at net realizable value. This value includes an appropriate allowance for estimated uncollectible accounts to reflect any loss anticipated on the trade accounts receivable and unbilled receivables. Unbilled receivables include cost and gross profit earned in excess of billings. The allowance for doubtful accounts is an estimate to cover the losses resulting from the inability of customers to make payments on their outstanding balances and unbilled receivables. In estimating the required allowance, management considers the overall quality and aging of the accounts receivable, specific customer circumstances, current economic trends, and historical experience with collections. On December 31, 2022 and 2021, the allowance for doubtful accounts is $45,354 and $15,622, respectively.

Inventories

Inventories are valued at the lower of cost or net realizable value. The Company uses the average cost method for purposes of determining cost, which approximates the first-in, first-out method.

The Company establishes reserves on its inventories to write-down the carrying value of its estimated obsolete or excess inventories to estimated net realizable value based upon observations of historical usage and assumptions about future demand and market conditions. In addition, the Company considers changes in the market value of components in determining the net realizable value of its inventory. Inventory reserves are not typically reversed until the specific inventories are sold or otherwise disposed.

Actual demand, product mix and alternative usage may be lower than those that we project, and this difference could have a material adverse effect on our gross margin if inventory write-downs beyond those initially recorded become necessary. Alternatively, if actual demand, product mix and alternative usage are more favorable than those we estimated at the time of such a write-down, our gross margin could be favorably impacted in future periods.

Property and Equipment

Property and equipment, other than leasehold improvements, are recorded at cost and depreciated using the straight-line method over the estimated useful lives of the assets, generally from two to seven years. Leasehold improvements are recorded at cost and are amortized using the straight-line method over the shorter of the remaining lease term or the estimated useful life of the related asset. Tooling and test equipment includes capitalized labor costs associated with the development of the related tooling and test equipment. Costs incurred for maintenance and repairs are expensed as incurred, and expenditures for major replacements and improvements are capitalized. Upon retirement or sale, the cost and related accumulated depreciation and amortization of disposed assets are removed from the accounts and any resulting gain or loss is included in other (expense) income, net.

Leases

In February 2016, the FASB issued ASU No. 2016-02, “Leases” which sets out the principles for the recognition, measurement, presentation, and disclosure of leases for both parties to a contract (i.e., lessees and lessors). The standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases. A lease must be classified as a finance lease if any of the following criteria are met: the lease transfers ownership of the asset by the end of the lease term, the lease contains an option to purchase the asset that is reasonably certain to be exercised, the lease term is for a major part of the remaining useful life of the asset or the present value of the lease payments equals or exceeds substantially all of the fair value of the asset. A lease is classified as an operating lease if it does not meet any of these criteria. The Company determines if a contract is or contains a lease at inception or modification of a contract. A contract is or contains a lease if the contract conveys the right to control the use of an identified asset for a period in exchange for consideration. Control over the use of the identified asset means the lessee has both (a) the right to obtain substantially all of the economic benefits from the use of the asset and (b) the right to direct the use of the asset. This classification will determine whether the lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease.

Right-of-use assets and liabilities are initially measured at cost, which primarily comprises the initial amount of the lease liability, plus any initial direct costs incurred, consisting mainly of brokerage commissions, less any lease incentives received. All right of use assets are reviewed for impairment. The lease liability is initially measured at the present value of future minimum lease payments over the expected lease term at the commencement date of each lease. The Company measures and records a right-of-use asset and lease liability based on the discount rate implicit in the lease, if known. Generally, the Company cannot determine the interest rate implicit in the lease because it does not have access to the lessor's estimated residual value or the amount of the lessor's deferred initial direct costs.

In these cases where the discount rate implicit in the lease is not known, the Company measures the right-of-use assets and lease liabilities using a discount rate equal to the Company's incremental borrowing rate it pays on current debt instruments or would have to pay on a collateralized basis to borrow an amount equal to the lease payments under similar terms.

The Company and its subsidiary have no leases classified as finance leases. The Company and its subsidiary currently lease plant, office facilities and equipment under operating leases expiring through August 2024. As of December 31, 2022, the weighted average remaining lease term for our operating leases was 20.2 months. The weighted average discount rate for our operating leases was 12.8%.

The Company’s lease agreements may include options to extend the lease following the initial term. On a case-by-case basis, the Company’s management determines if it is reasonably certain to exercise the renewal option; such renewal options were included in determining the initial lease term.

We elected the package of practical expedients in transition for leases that commenced prior to January 1, 2022, and therefore did not reassess (i) whether any expired or existing contracts are, or contain, leases, (ii) the lease classification for any expired or existing leases, and (iii) initial direct costs for any existing leases. We elected to use hindsight for transition when considering judgments and estimates such as assessments of lease options to extend, or terminate, a lease, or to purchase the underlying asset. As result of the adoption of ASC 842, the Company recognized an accumulative adjustment to beginning retained earnings for the 2022 fiscal year of $44,533.

For all asset classes, we elected to (i) not recognize a right-of-use asset and lease liability for leases with a term of 12 months or less and (ii) not separate non-lease components from lease components, and we have accounted for combined lease and non-lease components as a single lease component. Variable lease payments associated with the Company's leases are recognized upon occurrence of the event, activity, or circumstance in the lease agreement on which those payments are assessed. For those leases that are subsequently modified for terms, such changes may require a remeasurement of the lease liability.

Lease expense for operating leases consists of the lease payments plus any initial direct costs, primarily brokerage commissions, and is recognized on a straight-line basis over the lease term. Included in lease expense are any variable lease payments incurred in the period that were not included in the initial lease liability. Lease expense for finance leases consists of the amortization of the right-of-use asset on a straight-line basis over the lease term and interest expense determined on an amortized cost basis. The lease payments are allocated between a reduction of the lease liability and interest expense.

Goodwill

Goodwill represents the excess of the purchase price paid over the fair value of the net assets acquired in business combinations. Goodwill is not amortized but is tested for impairment at least annually and when we deem that a triggering event has occurred. The Company reviews goodwill for impairment annually on December 31st. The Company completed its annual assessment for goodwill impairment and determined that goodwill was not impaired as of December 31, 2022, and no adjustment was required.

Intangible Assets and Long-lived Assets

We evaluate our intangible and long-lived assets for impairment when events or circumstances arise that indicate our intangible and long-lived assets may be impaired. Indicators of impairment include, but are not limited to, a significant deterioration in overall economic conditions, a decline in our market capitalization, the loss of significant business, significant decreases in funding for our contracts, or other significant adverse changes in industry or market conditions. The Company completed its qualitative assessment for impairment in December 2022, and determined that there was no impairment as of December 31, 2022. Though there were indicators of impairment that directly impacted our business, as a result of the Company's market valuation, raising cash, management's continued cost containment efforts, and focus on profitability, there is no impairment of its intangible and long-lived assets. There can be no assurance; however, that market conditions will not change or demand for the Company's products will continue, which could result in an impairment of intangible and long-lived assets in the future.

Fair Value Measurements

The Company uses a three-tier fair value hierarchy to classify and disclose all assets and liabilities measured at fair value on a recurring basis, as well as assets and liabilities measured at fair value on a non-recurring basis, in periods subsequent to their initial measurement. These tiers include:

•Level 1, defined as quoted market prices in active markets for identical assets or liabilities;

•Level 2, defined as inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, model-based valuation techniques for which all significant assumptions are observable in the market, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and

•Level 3, defined as unobservable inputs that are not corroborated by market data.

The carrying value of financial instruments including cash and cash equivalents, accounts receivable, and accounts payable and accrued expenses, and other liabilities approximate fair value due to the short-term nature of these instruments. The carrying amounts of the Company's short-term investments, notes payable and OSS Europe's existing lines of credit and notes payable approximate their fair values at the stated interest rates and are reflective of the prevailing market rates.

Revenue Recognition

The Company's revenues are recognized in accordance with ASC 606, Revenue from Contracts with Customers for which the Company's performance obligations are satisfied over time as work is performed or at a point in time. The majority of the Company's revenue is recognized at a point in time when products ship and control is transferred to the customer. The Company determines revenue recognition through the following steps: (i) identification of the contract with a customer; (ii) identification of the performance obligations in the contract; (iii) determination of the transaction price; (iv) allocation of the transaction price to the performance obligations in the contract; and (v) recognition of revenue when, or as, a performance obligation is satisfied.

The Company's contracts are executed through a combination of written agreements along with purchase orders with all customers including certain general terms and conditions. Generally, purchase orders entail products, quantities and prices, which define the performance obligations of each party and are approved and accepted by the Company. The Company's contracts with customers typically do not include extended payment terms. Payment terms vary by contract type and type of customer and generally range from 30 to 60 days from invoice. Additionally, taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction, that are collected by the Company from a customer and deposited with the relevant government authority, are excluded from revenue.

The transaction price is determined based on the consideration to which the Company will be entitled in exchange for transferring goods or services to the customer adjusted for estimated variable consideration, if any. Variable consideration may include discounts, rights of return, refunds, and other similar obligations. The Company allocates the transaction price to each distinct product and service based on its relative standalone selling price. The standalone selling price for products primarily involves the cost to produce the deliverable plus the anticipated margin and for services is estimated based on the Company's approved list price.

In the normal course of business, the Company does not accept product returns unless the items are defective as manufactured. The Company establishes provisions for estimated returns and warranties. In addition, the Company does not typically provide customers with the right to a refund and does not transact for noncash consideration.

Customer agreements include one vendor managed inventory program. The Company recognizes revenue under this arrangement when all of the following criteria are met: (i) the goods have been identified separately as belonging to the customer; (ii) the goods are ready for physical shipment to the customer; (iii) the Company does not have the ability to direct the goods to another customer; and (iv) the arrangement was requested by the customer and that the customer has sufficiently explained a substantial business purpose for the arrangement. Management also considers whether the customer's custodial risks are insured and whether modifications to the Company's normal billing and credit terms were required.

The Company recorded revenue from product sales that are held in vendor managed inventory under this agreement of $18,504,677 and $12,544,422 for the years ended December 31, 2022 and 2021, respectively. As of December 31, 2022 and 2021, $3,446,474 and $1,128,033, respectively, of products sold through those dates were held by the Company in the vendor management program.

Revenues on certain fixed-price contracts where we provide engineering services, prototypes and completed products are recognized over time based upon the output method as milestones are met and value is delivered to the customer, which depicts the Company's progress toward fulfilling its performance obligations. These services require that we perform significant, extensive, and complex design, development, modification or implementation of our customers' systems. Performance will often extend over long periods of time, and our right to receive future payment depends on our future performance in accordance with the agreement. If changes occur in delivery, productivity or other factors used in developing the estimates of costs or revenues, we revise our cost and revenue estimates, which may result in increases or decreases in revenues and costs, and such revisions are reflected in earnings in the period in which the revision becomes known. There were no significant unbilled or incomplete milestone projects as of December 31, 2022 and 2021.

The Company's operating segment revenues, disaggregated by primary geographic market, which is determined based on a customer's geographic location, for the years ended December 31, 2022 and 2021, are as follows:

	For the Year Ended December 31, 2022			For the Year Ended December 31, 2021		
Entity:	**Domestic**	**International**	**Total**	**Domestic**	**International**	**Total**
Customized computers and flash arrays	$ 22,506,650	$ 20,780,065	$ 43,286,715	$ 20,685,839	$ 17,806,165	$ 38,492,004
Value-added reseller with minimal customization	-	29,134,630	29,134,630	10,113	23,479,987	23,490,100
	$ 22,506,650	$ 49,914,695	$ 72,421,345	$ 20,695,952	$ 41,286,152	$ 61,982,104

Warranty Reserve

The Company offers product warranties that extend for one or two years from the date of sale. Such warranties are considered assurance-type warranties; therefore, they would not be deemed to be a separate performance obligation under ASC 606. Such warranties require the Company to repair or replace defective product returned to the Company during the warranty period at no cost to the customer. The Company records an estimate for warranty-related costs based on its historical and estimated future product return rates and expected repair or replacement costs (Note 8).

While such costs have historically been within management's expectations and the provisions established, unexpected changes in failure rates could have a material adverse impact on the Company, requiring additional warranty reserves and could adversely affect the Company's gross profit and gross margins.

The Company offers customers extended warranties beyond the standard one-year warranty on the product. The extended warranties are considered service-type warranties and would be considered as a separate performance obligation under ASC 606. The Company is the primary obligor and revenue is recognized on a gross basis ratably over the term of the extended warranty. The customer can purchase extended warranties from one to five years, in the bronze, silver or gold categories. This entails hardware repair or replacement, shipping methods on how the warranties will be returned/delivered, response times and hours of operations to receive support. The value of warranties sold for years ended December 31, 2022 and 2021, were $302,422 and $76,502, respectively.

The revenue that was recognized for the warranties sold for the years ended December 31, 2022 and 2021, were $233,010 and $306,373, respectively. The Company does have recourse with some of its suppliers that offer more than a one-year guarantee on parts, but this is not standard. For the few that offer greater than a year warranty, the Company may be able to recover the cost of the part from the manufacturer for the failed part. The amounts of these costs vary in a wide range, but are not material, due to the infrequency of failure. As of December 31, 2022 and 2021, deferred revenue totaled $191,952 and $177,898, respectively. The Company expects to recognize approximately $191,952 of unearned revenue amounts from 2023 through 2025.

Shipping and Handling Costs

The Company's shipping and handling costs are included in cost of goods sold for all periods presented.

Foreign Currency

We operate primarily in the United States. Foreign sales of products and services are primarily denominated in U.S. dollars. We also conduct business outside the United States through our foreign subsidiary in Germany, where business is largely transacted in non-U.S. dollar currencies particularly the Euro, which is subject to fluctuations due to changes in foreign currency exchange rates. Accordingly, we are subject to exposure from changes in the exchange rates of local currencies. Foreign currency transaction gains and losses are recorded in other income (expense), net in the consolidated statements of operations.

OSS GmbH operates as an extension of OSS' domestic operations. The functional currency of OSS GmbH is the Euro. Transactions denominated in currencies other than the functional currency are remeasured to the functional currency at the average exchange rate in effect during the period. At the end of each reporting period, monetary assets and liabilities are remeasured using exchange rates in effect at the balance sheet date. Non-monetary assets and liabilities are remeasured at historical exchange rates. Consequently, changes in the exchange rates of the currencies may impact the translation of the foreign subsidiaries' statements of operations into U.S. dollars, which may in turn affect our consolidated statement of operations. The resulting foreign currency translation adjustments are recorded as a separate component of accumulated other comprehensive income (loss) in the consolidated balance sheets.

Derivative Financial Instruments

We may employ derivatives to manage certain currency market risks through the use of foreign exchange forward contracts. We do not use derivatives for trading or speculative purposes. Our derivatives are designated as a hedge of a forecasted transaction or of the variability of cash flows to be received or paid related to a recognized asset or liability (cash flow hedge). We hedge a portion of the exchange risk involved in anticipation of highly probable foreign currency-denominated transactions. In anticipation of these transactions, we enter into foreign exchange contracts to provide currency at a fixed rate. As of December 31, 2022 and 2021, OSS Europe had no foreign exchange contract outstanding.

Unrealized gains on derivatives designated as cash flow hedges are recorded at fair value as assets, and unrealized losses on derivatives designated as cash flow hedges are recorded at fair value as liabilities. For derivative instruments designated as cash flow hedges, the effective portion is reported as a component of accumulated OCI until reclassified into interest expense in the same period the hedged transaction affects earnings. The gain or loss on the ineffective portion is recognized as "Other (expense) income, net" in the consolidated statements of operations in each period.

Stock-Based Compensation

The Company accounts for employee and director share-based compensation in accordance with the provisions of ASC Topic 718 *"Compensation – Stock Compensation"*. Under ASC 718, share-based compensation cost is measured at the grant date, based on the calculated fair value of the award, and is recognized as an expense over the employee's requisite service period (generally the vesting period of the equity grant).

All transactions in which goods or services are the consideration received for the issuance of equity instruments to non-employees are accounted for based on the equivalent fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable on the grant date. The measurement date used to determine the estimated fair value of the equity instrument issued is the earlier of the date on which the third-party performance is complete or the date on which it is probable that performance will occur.

Employee and director stock-based compensation expense recognized during the period is based on the value of the portion of stock-based payment awards that is ultimately expected to vest during the period. Given that stock-based compensation expense recognized in the accompanying consolidated statements of operations is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures. The Company's estimated average forfeiture rates are based on historical forfeiture experience and estimated future forfeitures.

Compensation cost for stock awards, which include restricted stock units ("RSUs"), is measured at the fair value on the grant date and recognized as expense, net of estimated forfeitures, over the related service period. The fair value of stock awards is based on the quoted price of our common stock on the grant date.

The estimated fair value of common stock option awards is calculated using the Black-Scholes option pricing model. The Black-Scholes model requires subjective assumptions regarding future stock price volatility and expected time to exercise, along with assumptions about the risk-free interest rate and expected dividends, all of which affect the estimated fair values of the Company's common stock option awards. Given a lack of historical stock option exercises, the expected term of options granted is calculated as the average of the weighted vesting period and the contractual expiration date of the option. This calculation is based on a method permitted by the Securities and Exchange Commission in instances where the vesting and exercise terms of options granted meet certain conditions and where limited historical exercise data is available. The expected volatility is based on the historical volatility of the common stock of comparable public companies that operate in similar industries as the Company.

The risk-free rate selected to value any particular grant is based on the U.S. Treasury rate that corresponds to the expected term of the grant effective as of the date of the grant. The expected dividend assumption is based on the Company's history and management's expectation regarding dividend payouts. Compensation expense for common stock option awards with graded vesting schedules is recognized on a straight-line basis over the requisite service period for the last separately vesting portion of the award, provided that the accumulated cost recognized as of any date at least equals the value of the vested portion of the award.

If there are any modifications or cancellations of the underlying vested or unvested stock-based awards, the Company may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense, or record additional expense for vested stock-based awards. Future stock-based compensation expense and unearned stock- based compensation may increase to the extent that the Company grants additional common stock options or other stock-based awards.

Business Combinations

We utilize the acquisition method of accounting for business combinations and allocate the purchase price of an acquisition to the various tangible and intangible assets acquired and liabilities assumed based on their estimated fair values. We primarily establish fair value using the income approach based upon a discounted cash flow model. The income approach requires the use of many assumptions and estimates including future revenues and expenses, as well as discount factors and income tax rates. Other estimates include:

- estimated step-ups or write-downs for fixed assets and inventory;
- estimated fair values of intangible assets; and
- estimated income tax assets and liabilities assumed from the target.

While we use our best estimates and assumptions as part of the purchase price allocation process to accurately value assets acquired and liabilities assumed at the business acquisition date, our estimates and assumptions are inherently uncertain and subject to refinement. As a result, during the purchase price allocation period, which is generally one year from the business acquisition date, we record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill.

For changes in the valuation of intangible assets between preliminary and final purchase price allocation, the related amortization is adjusted in the period it occurs. Subsequent to the purchase price allocation period any adjustment to assets acquired or liabilities assumed is included in operating results in the period in which the adjustment is determined. Should we issue shares of our common stock in an acquisition, we will be required to estimate the fair value of the shares issued. See Note 7.

Debt Discounts

Debt discounts, which originate from the relative fair value of warrants issued in connection with notes payable and related-party notes payable, are recorded against the notes payable and related-party notes payable in the accompanying consolidated balance sheets.

Amortization of the debt discounts are calculated using the straight-line method over the term of the applicable notes which approximates the effective interest method and are recorded in interest expense in the accompanying consolidated statements of operations.

Advertising Costs

Advertising costs are expensed as incurred and included in marketing and selling expense in the accompanying consolidated statements of operations. Advertising costs for the years ended December 31, 2022 and 2021, were $510,676 and $356,874, respectively.

Research and Development Expenses

Research and development expenditures are expensed in the period incurred. Research and development expenses primarily consist of salaries, benefits and stock-based compensation, as well as consulting expenses and allocated facilities and other overhead costs. Research and development activities include the development of new technologies, features and functionality in support of the Company’s products and customer needs.

Income Taxes

The Company utilizes the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on the difference between the consolidated financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

Under ASC Topic 740, the impact of an uncertain income tax position on the income tax return must be recognized at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. Additionally, ASC Topic 740 provides requirements for derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The Company’s policy is to recognize interest and/or penalties related to income tax matters in income tax expense.

The Company files income tax returns in the U.S. federal jurisdiction, California and various other state jurisdictions, and Germany. The Company has elected to treat the tax effect of Global Intangible Low Tax Income (“GILTI”) as a current-period expense when occurred. The Company does not foresee material changes to its gross liability of uncertain tax positions within the next twelve months.

On August 16, 2022, Congress passed, and the President signed into law, the Inflation Reduction Act, 2022 (“the “IRA”), which includes certain business tax provisions. The Company does not expect the IRA to have a material impact on the Company’s effective tax rate or income tax provision for the year ending December 31, 2022.

On March 11, 2021, Congress passed, and the President signed into law, the American Rescue Plan Act, 2021 (the “ARP”), which includes certain business tax provisions. At this point, we do not believe that these changes will have a material impact on our income tax provision for 2022. We will continue to evaluate the impact of new legislation on our financial position, results of operations, and cash flows.

The U.S. Tax Cuts and Jobs Act (“TCJA”) was signed into law on December 22, 2017. Guidance continues to be issued clarifying the application of this legislation and recent proposed legislation known as Build Back Better is under consideration within both houses of U.S. Congress. Significant business and international provisions have been proposed in various versions of the framework of the bill that could increase our total tax expense. We cannot predict the overall impact that the additional guidance and proposed changes may have on our business. Some jurisdictions have raised tax rates and it is reasonable to expect that other global taxing authorities will be reviewing current legislation for potential modifications in reaction to the implementation of U.S. tax legislation, current economic conditions, and COVID-19 response costs.

Due to the COVID-19 pandemic, economic uncertainty, inflation, increases in interest rates, capital markets disruption, which has been significantly impacted by geopolitical instability due to the ongoing military conflict between Russia and Ukraine, and supply chain issues, our business, financial condition and results of operations could be materially adversely affected by any negative impact from these events. We are not aware of any specific event or circumstance that would require an update to our estimates or assumptions or a revision of the carrying value of our assets or liabilities as of December 31, 2022. These estimates and assumptions may change as new events occur and additional information is obtained. As a result, actual results could differ materially from these estimates and assumptions.

Interest Expense

Interest expense consists primarily of interest associated with the Company's issued debt including the amortization of debt discounts. The Company recognizes the amortization of debt discounts and the amortization of interest costs using a straight-line method which approximates the effective interest method.

Net Income (Loss) Per Share

Basic net income (loss) per share is calculated by dividing net income (loss) by the weighted-average common shares outstanding during the period. Diluted net income (loss) per share is calculated by dividing the net income (loss) by the weighted-average shares and dilutive potential common shares outstanding during the period. Dilutive potential shares consist of dilutive shares issuable and the exercise or vesting of outstanding stock options, restricted stock units and warrants, respectively, computed using the treasury stock method. During a period where a net loss is incurred, dilutive potential shares are excluded from the computation of dilutive net loss per share, as inclusion is anti-dilutive.

Recent Accounting Pronouncements

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.* ASU 2016-13 amends the guidance on the impairment of financial instruments. This update adds an impairment model (known as the current expected credit losses model) that is based on expected losses rather than incurred losses. Under the new guidance, an entity recognizes, as an allowance, its estimate of expected credit losses. In November 2019, ASU 2016-13 was amended by ASU 2019-10 that changed the effective date of ASU 2016-13 to fiscal years beginning after December 15, 2022, with early adoption permitted. Further, the ASU clarifies that operating lease receivables are not within the scope of ASC Subtopic 326-20 and should instead be accounted for under the new leasing standard, ASC 842. The Company does not expect any material change from adopting ASU 2016-13 on its consolidated financial statements and related disclosures.

NOTE 3 - SHORT-TERM INVESTMENTS

The Company's short-term investments by significant investment category as of December 31, 2022, were as follows:

Description	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Accrued Interest	Estimated Fair Value
Level 1: (1)					
Cash alternatives	$ 5,139,940	$ 22,646	$ -	$ 3,506	$ 5,166,092
Certificates of deposit	4,950,527	-	(7,691)	14,607	4,957,443
Corporate bonds and notes	-	-	-	-	-
Municipal Securities	-	-	-	-	-
	$ 10,090,467	$ 22,646	$ (7,691)	$ 18,113	$ 10,123,535

(1)Level 1 fair value estimates are based on quoted prices in active markets for identical assets or liabilities.

The Company's short-term investments by significant investment category as of December 31, 2021, are as follows:

Description		Amortized Cost		Gross Unrealized Gains		Gross Unrealized Losses		Accrued Interest		Estimated Fair Value
Level 1: (1)										
Cash alternatives	$	2,172,853	$	-	$	-	$	-	$	2,172,853
Certificates of deposit		591,968		-		(3,294)		1,222		589,896
Corporate bonds and notes		4,293,722		-		(5,432)		46,820		4,335,110
Municipal Securities		7,411,043		-		(2,334)		29,182		7,437,891
	$	14,469,586	$	-	$	(11,060)	$	77,224	$	14,535,750

(1)Level 1 fair value estimates are based on quoted prices in active markets for identical assets or liabilities.

Cash alternatives represents cash balances in savings accounts which are temporarily on-hand that are immediately available for investments in accordance with the Company's investment policy.

The Company typically invests in highly rated securities and its investment policy limits the amount of credit exposure to any one issuer. The policy requires investments in fixed income instruments denominated and payable in U.S. dollars only and requires investments to be investment grade, with a primary objective of minimizing the potential risk of principal loss.

NOTE 4 – ACCOUNTS RECEIVABLE

Accounts receivable, net consisted of the following on December 31:

		December 31, 2022		December 31, 2021
Accounts receivable	$	11,372,598	$	5,105,426
Less: allowance for doubtful accounts		(45,354)		(15,622)
	$	11,327,244	$	5,089,804

Unbilled receivables include amounts associated with percentage of completion and milestone billing accounting, which includes cost and gross profit earned in excess of billing, not currently billable due to contractual provisions. The provision and recovery for bad debt expense related to accounts receivable was $29,154 and $(17,013) for the years ended December 31, 2022 and 2021, respectively.

NOTE 5 – INVENTORIES

Inventories, net consisted of the following on December 31:

		December 31, 2022		December 31, 2021
Raw materials	$	9,370,162	$	5,603,868
Sub-assemblies		892,123		495,320
Work-in-process		1,343,239		518,838
Finished goods		10,357,452		6,228,892
		21,962,976		12,846,918
Less: allowances for obsolete and slow-moving inventories		(1,187,610)		(569,045)
	$	20,775,366	$	12,277,873

NOTE 6 – PROPERTY AND EQUIPMENT

Property and equipment, net consisted of the following on December 31:

	December 31, 2022	December 31, 2021
Computers and computer equipment	$ 825,086	$ 743,807
Furniture and office equipment	469,060	435,342
Manufacturing equipment and engineering tools	2,713,137	2,622,059
ERP Financial System	2,585,357	2,404,967
Leasehold improvements	1,036,947	976,967
Vehicles	9,745	4,012
	7,639,332	7,187,154
Less: accumulated depreciation and amortization	(5,069,208)	(4,095,739)
	$ 2,570,124	$ 3,091,415

During the years ended December 31, 2022 and 2021, the Company incurred $987,068 and $923,735 of depreciation and amortization expense related to property and equipment, respectively.

NOTE 7 – LONG LIVED INTANGIBLE ASSETS

Definite lived intangible assets related to acquisitions were as follows as of December 31, 2022:

	Expected Life	Remaining Months	Gross Intangible Assets	Accumulated Amortization	Net Intangible Assets
Customer lists and relationships	36 to 60 months	8 months	$ 2,084,515	$ (2,042,361)	$ 42,154
Drawings and technology	36 months	0 months	760,207	(760,207)	-
Trade name, trademarks & other	24 to 36 months	0 months	447,274	(447,274)	-
Non-compete	36 months	0 months	246,797	(246,797)	-
			$ 3,538,793	$ (3,496,639)	$ 42,154

Definite lived intangible assets related to acquisitions were as follows as of December 31, 2021:

	Expected Life	Remaining Months	Gross Intangible Assets	Accumulated Amortization	Net Intangible Assets
Customer lists and relationships	60 months	20 months	$ 2,084,515	$ (1,979,130.00)	$ 105,385
Drawings and technology	36 months	0 months	760,207	$ (760,207.00)	
Trade name	24 months	0 months	447,274	(447,274.00)	-
Non-compete	36 months	0 months	246,797	(246,797.00)	-
			$ 3,538,793	$ (3,433,408)	$ 105,385

The amortization expense of the definite lived intangible assets for the years remaining is as follows:

2023	Total
$ 42,154	$ 42,154

Amortization expense recognized during the years ended December 31, 2022 and 2021, was $63,231 and $556,873, respectively.

NOTE 8 – ACCRUED EXPENSES AND OTHER LIABILITIES

Accrued expenses and other liabilities consist of the following on December 31:

	December 31, 2022	December 31, 2021
Accrued compensation and related liabilities	$ 989,478	$ 1,372,342
Deferred revenue	378,952	177,898
Customer deposits	61,696	666,183
Warranty reserve	584,268	571,903
Trade and other taxes	225,743	242,767
Deferred rent	-	512,211
Other accrued expenses	773,732	303,184
	$ 3,013,869	$ 3,846,488

NOTE 9 – DEBT

Bank Lines of Credit

The Company obtained a domestic revolving line of credit of $2,000,000 with Torrey Pines Bank in April 2022, which renews on an annual basis at the current prime rate. To access this line of credit the Company must maintain cash and investments balances at a minimum of $4,000,000. No balance was outstanding on December 31, 2022.

OSS Europe has three revolving lines of credit with German institutions, including Uni Credit Bank AG, Commerzbank AG, and VR Bank with total availability of up to €2,200,000 (US$2,361,108) as of December 31, 2022. Borrowings under the lines of credit bear interest at a variable rate of Euribor plus a stated rate. The rates as of December 31, 2022, for the lines of credit ranged from 3.1% to 5.6%, with the balances remaining open indefinitely or until occurrence of a defined change of control event. There were no outstanding lines of credit balances as of December 31, 2022 and 2021.

Foreign Debt Obligations

OSS Europe had five term loans outstanding as of December 31, 2022, with an aggregate balance outstanding of €3,132,356 (US$3,361,741) as follows:

• On February 1, 2022, OSS Europe converted €500,000 of its line of credit from VR Bank into a note payable, which bears interest at 1.95% with interest only payments to be paid on a quarterly basis. The note was originally due on August 1, 2022. On August 1, 2022, this note was extended through February 1, 2023, (see Note 18) and the interest rate was increased to 2.19% with accrued interest having been paid current as of the original maturity date. The balance outstanding as of December 31, 2022, was €500,000 (US$536,616);

• On February 16, 2022, OSS Europe converted €500,000 of its line of credit from UniCredit Bank into a note payable, which bears interest at 1.580% with interest only payments to be paid on a quarterly basis. The note was originally due on August 16, 2022. On August 16, 2022, this note was extended through February 16, 2023, (see Note 18) and the interest rate was increased to 2.875% with accrued interest having been paid current as of the original maturity date. The outstanding balance as of December 31, 2022, was €500,000 (US$536,616);

• On April 9, 2021, OSS Europe converted €500,000 of its line of credit from Commerzbank AG into a note payable, which bore interest at 1.60% with interest only payments to be paid on a quarterly basis. The note was due on September 30, 2021, with a payment of principal and interest due upon maturity. This loan was paid in full on September 30, 2021, with proceeds from a new note that bears interest at 1.685% with similar terms. This new note had an original maturity date of June 30, 2022; however, this note was renewed and extended to September 30, 2022. On September 30, 2022, this note was further extended through March 31, 2023, and the interest rate was increased to 3.875% with accrued interest having been paid current as of the original maturity date. The balance outstanding on the new note as of December 31, 2022 and 2021, was €500,000 (US$536,616), and (US$568,825), respectively;

• On June 18, 2021, OSS Europe converted €500,000 of its line of credit from UniCredit Bank into a note payable, which bore interest at 1.487% with interest only payments to be paid on a quarterly basis. The note was due December 17, 2021, and subsequently extended through June 17, 2022. On June 17, 2022, this note was further extended through December 19, 2022, and the interest rate was increased to 2.45%, with accrued interest having been paid current as of the original maturity date. On December 19, 2022, this note was further extended through June 19, 2023, and the interest rate was increased to 4.70%, with accrued interest having been paid current as of the original maturity date. The balance outstanding on the new note as of December 31, 2022 and 2021, was €500,000 (US$536,616) and (US$568,825) respectively;

• On June 30, 2022, OSS Europe borrowed €1,500,000 (US$1,468,173) from Commerzbank AG, which bears interest at 2.55% is due in June 2024, and is repayable in twenty-four monthly installments, with payments beginning July 31, 2022. The balance outstanding as of December 31, 2022, was €1,132,356 (US$1,215,279). This loan is collateralized by accounts receivable attributable to a specific customer; and

In April 2019, the Company borrowed an aggregate of $350,000 from three individuals for a two-year period at an interest rate of 9.5%, which requires the Company to make monthly principal and interest payments of $16,100 per month. These loans were secured by the assets of the Company. In connection with these loans, the Company issued to the noteholders warrants to purchase shares of the Company's common stock in an amount equal to 10% of the original principal at a price per share equal to $2.15. Accordingly, the Company issued to the noteholders warrants to purchase an aggregate of 16,276 shares of the Company's common stock at an exercise price of $2.15 per share. The relative fair value of each warrant was $0.90. The relative fair value of warrants was estimated using Black-Scholes with the following weighted-average assumptions: fair value of the Company's common stock at issuance of $2.15 per share; five year contractual term; 44.60% volatility; 0.0% dividend rate; and a risk-free interest rate of 2.307%. The total relative fair value of the warrants issued is $14,037. These loans have matured, and all balances have been paid in full. As such, the balances outstanding as of December 31, 2022 and 2021 were $0.

Notes Payable – Related Parties

In April 2019, the Company borrowed an aggregate of $1,150,000 from certain members of the Company's board of directors for a two-year period at an interest rate of 9.5%, which requires the Company to make monthly principal and interest payments of $52,900 per month. These loans were secured by the assets of the Company. In connection with these loans, the Company issued to the noteholders warrants to purchase shares of the Company's common stock in an amount equal to 10% of the original principal at a price per share equal to $2.15. Accordingly, the Company issued to the noteholders warrants to purchase an aggregate 53,490 shares of the Company's common stock at an exercise price of $2.15 per share. The relative fair value of each warrant was $0.90. The relative fair value of warrants was estimated using Black-Scholes with the following weighted-average assumptions: fair value of the Company's common stock at issuance of $2.15 per share; five year contractual term; 42.60% volatility; 0.0% dividend rate; and a risk-free interest rate of 2.3067%. The relative fair value of warrants issued is $46,121. These loans have matured, and all balances have been paid in full, as such, the balances outstanding as of December 31, 2022 and 2021, were $0.

Debt Discount

The relative fair value of warrants issued in connection with the notes payable described above were recorded as debt discount, decreasing notes payable and related-party notes payable and increasing additional paid-in-capital on the accompanying consolidated balance sheets. The debt discounts are being amortized to interest expense over the term of the corresponding notes payable using the straight-line method which approximates the effective interest method. Amortization of debt discounts of $0 and $7,077, were recognized as interest expense for the years ended December 31, 2022 and 2021, respectively.

Paycheck Protection Program Loan

On April 28, 2020, the Company received authorization pursuant to the Paycheck Protection Program ("PPP") of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") as administered by the U.S. Small Business Administration (the "SBA") for a PPP loan. On May 11, 2020, the loan was funded, and the Company received proceeds in the amount of $1,499,360 (the "PPP Loan").

The PPP Loan, which took the form of a two-year promissory note (the "PPP Note"), was scheduled to mature on April 28, 2022, and bore interest at a rate of 1.0% per annum. Monthly principal and interest payments, less the amount of any potential forgiveness (discussed below), was initially to commence on October 28, 2020. The Company did not provide any collateral or guarantees for the PPP Loan, nor did the Company pay any facility charge to obtain the PPP Loan. The PPP Note provided for customary events of default, including, among others, those relating to failure to make payment, breaches of any term, obligation, covenant, or condition contained in the PPP Note and payment of unauthorized expenses or use of proceeds contrary to CARES Act rules.

The Company submitted an application with the lender to forgive the PPP Loan, in accordance with SBA Procedural Notice, Control No. 5000-20057, effective as of October 2, 2020. On May 3, 2021, the Company received notification from the SBA that its PPP Loan of $1,499,360, plus accrued interest of $14,994, had been fully forgiven and such amount has been recognized as other income in the consolidated statement of income.

Senior Secured Convertible Note

On April 20, 2020, the Company entered into a Securities Purchase Agreement with an institutional investor, providing for the issuance by the Company of Senior Secured Convertible Promissory Notes with a principal face value of up to $6,000,000. The notes were, subject to certain conditions, convertible into shares of the Company's common stock, par value $0.0001 per share, at an initial conversion price per share of $2.50. Notes issued under the Securities Purchase Agreement had a 10% original issue discount.

At the initial closing of this offering, the Company issued notes in the principal amount of $3,000,000 with a 10% original issue discount resulting in an aggregate purchase price of $2,700,000 at the initial closing. The notes bore no interest rate (except upon event of default) and, unless earlier converted or redeemed, were scheduled to mature on April 1, 2022.

Pursuant to the Securities Purchase Agreement, the Company had the right to consummate additional closings of up to an additional $3,000,000, subject to the prior satisfaction of certain closing conditions. This right expired effective April 20, 2021, and the Company may no longer consummate additional closings under the Securities Purchase Agreement.

The notes were convertible at any time, in whole or in part, at the option of the investors, into shares of Company common stock at the initial conversion price of $2.50 per share. The conversion price was subject to adjustment for the issuances of securities at a price below the conversion price then in effect and for stock splits, combinations or similar events. If immediately following the close of business on the nine month anniversary of the issuance date of each note, the conversion price then in effect exceeded 135% of the volume weighted average price VWAP (the "Market Price"), the initial conversion price under any such note would be automatically lowered to the Market Price.

Subject to the satisfaction of certain equity conditions set forth in the notes, installment amounts could be satisfied in shares of our common stock, with such installment conversion at a conversion price equal to the lower of (i) the conversion price then in effect; and (ii) the greater of (x) the floor price of $1.00 (80% of the Nasdaq market price at date of purchase agreement) and (y) the lower of (I) 82.5% the volume weighted average price of our common stock on the trading day immediately before the applicable installment date and (II) 82.5% of the quotient of (A) the sum of the volume weighted average price of our common stock for each of the three (3) trading days with the lowest volume weighted average price of our common stock during the twenty (20) consecutive trading day period ending and including the trading day immediately prior to the applicable installment date, divided by (B) three (3). Shares of our common stock to be issued with respect to any such installment would be pre-delivered on the second trading day after the applicable installment notice date (as defined in the notes) with a true-up on the applicable installment date. The market value of any installment amount below the floor price would be cash settled on the applicable installment date.

Commencing July 1, 2020, the Company made monthly amortization payments equal to 1/22nd of the initial principal, any accrued and unpaid interest, and late charges and any deferred or accelerated amount, of such note, which could be satisfied in cash at a redemption price equal to 105% of such installment amount (110% of such installment amount on notes issued at additional closings). The remaining balance of the notes of $2,590,909 was converted into Company common stock on March 30, 2022; accordingly, the outstanding balance of the notes as of December 31, 2022 was $0.

Management evaluated the embedded conversion feature to determine whether bifurcation was required as a separate derivative liability. Management first determined that the conversion feature was not within the scope of ASC 480. It then determined that the embedded derivative should be separated from the host instrument and accounted for as a derivative instrument because it met the criteria of ASC 815-15-25-1, primarily because the contract provides for delivery of an asset that puts the recipient in substantially the same position as net settlement. However, due in part to the Company's adoption of ASC 2017-11 on April 1, 2020, which allowed management to disregard the down round provisions of the conversion feature, management determined that a scope exception to derivative accounting existed by satisfying the additional conditions necessary for equity classification specified by ASC 815-10-15-74 and ASC 815-40-25. As a result of management's analysis, the conversion feature was not accounted for separately from the debt instrument and the Company will recognize the contingent beneficial conversion feature when, or if, such is triggered.

The original issue discount of 10% on the note was recorded as a debt discount, decreasing the note payable. This debt discount is amortized to interest expense using the effective interest rate method over the term of the loan. For the year ended December 31, 2022 and 2021, total debt discount amortization was $0 and $139,217, respectively. Such amounts are included in interest expense in the accompanying consolidated statements of income.

Debt issuance costs in the amount of $316,274 related to this indebtedness were deducted from the face value of the note. Such costs are amortized to interest expense using the effective interest rate method over the term of the loan. Debt issuance costs amortized during the year ended December 31, 2022 and 2021, was $0 and $137,521, respectively. Such amounts are included in interest expense in the accompanying consolidated statements of income.

A summary of outstanding debt obligations as of December 31, 2022, are as follows:

Loan Description	Current Interest Rate	Maturity Date	Balance (Euro)	Balance ($)	Current Portion	Long-term Portion
Foreign:						
VR Bank	2.190%	February-23	€ 500,000	$ 536,616	$ 536,616	$ -
Uni Credit Bank AG	2.875%	February-23	500,000	536,616	536,616	-
Commerzbank AG	3.875%	March-23	500,000	536,616	536,616	-
Uni Credit Bank AG	4.700%	June-23	500,000	536,616	536,616	-
Commerzbank AG	2.550%	June-24	1,132,356	1,215,279	805,985	409,294
			€ 3,132,356	$ 3,361,741	$ 2,952,447	$ 409,294

Outstanding debt obligations as of December 31, 2022, consisted of the following:

Period Ended December 31, 2022	Foreign	Total
Current portion:		
Principal	$ 2,952,447	$ 2,952,447
Less discount	-	-
Less loan origination costs	-	-
Net liability	$ 2,952,447	$ 2,952,447
Long-term portion:		
Principal	$ 409,294	$ 409,294
Less discount	-	-
Less loan origination costs	-	-
Net liability	$ 409,294	$ 409,294
Total:		
Principal	$ 3,361,741	$ 3,361,741
Less discount	-	-
Less loan origination costs	-	-
Net liability	$ 3,361,741	$ 3,361,741

Total future payments under the notes payable described above as of December 31, 2022, were as follows:

Period Ending December 31,	Foreign	Total
2023	$ 2,952,447	$ 2,952,447
2024	409,294	409,294
Total minimum payments	3,361,741	3,361,741
Current portion of notes payable	(2,952,447)	(2,952,447)
Notes payable, net of current portion	$ 409,294	$ 409,294

NOTE 10 – STOCKHOLDERS' EQUITY

The Company's amended and restated certificate of incorporation, filed on December 14, 2017, authorizes the Company to issue 10,000,000 shares of preferred stock and 50,000,000 shares of common stock.

Common Stock

The voting, dividend and liquidation rights of the holders of the common stock are subject to rights of preferred stockholders, if any, as designated by the board of directors. Common stockholders have voting rights at all meetings of stockholders and are entitled to one vote for each share held subject to certain limitations otherwise required by law. Dividends may be declared and paid on the common stock as and when determined by the board of directors subject to any preferential dividend or other rights of preferred stockholders. The Company does not anticipate declaring any dividends in the foreseeable future. Upon the dissolution or liquidation of the Company, common stockholders are entitled to receive all assets of the Company, subject to any preferential or other rights of preferred stockholders.

Preferred Stock

Preferred Stock may be issued from time to time in one or more series, each of these series to have such terms as stated or expressed in resolutions providing for the issue of such series adopted by the board of directors. There is no outstanding preferred stock.

Regarding unissued preferred stock, the board of directors is authorized to determine or alter any or all of the rights, preferences, privileges and restrictions granted to or imposed upon wholly unissued series of preferred stock, and to fix or alter the number of shares comprising any such series and the designation thereof, or any of them, and to provide for rights and terms of redemption or conversion of the shares of any such series.

Stock Options

In December 2011, the Company adopted a stock option plan ("2011 Plan") under which the Company may issue up to 1,500,000 shares of the Company's common stock and, as of December 31, 2022, the Company had 240,000 shares of common stock remaining unissued under the 2011 Plan. The 2011 Plan was terminated by the board of directors on October 10, 2017, and accordingly, no shares are available for issuance under the 2011 Plan. The 2011 Plan will continue to govern outstanding awards granted thereunder.

In December 2015, the Company adopted a stock option plan ("2015 Plan") under which the Company may issue up to 1,500,000 shares of the Company's common stock and, as of December 31, 2022, the Company had 840,084 shares of common stock remaining unissued under the 2015 Plan. The 2015 Plan was terminated by the board of directors on October 10, 2017, and accordingly, no shares are available for issuance under the 2015 Plan. The 2015 Plan will continue to govern outstanding awards granted thereunder.

The terms of the 2011 Plan and 2015 Plan provided for the grant of incentive options to employees and non-statutory options to employees, directors and consultants of the Company.

The board of directors adopted the 2017 Equity Incentive Plan on October 10, 2017 (the "2017 Plan"). The 2017 Plan allows for the grant of a variety of equity vehicles to provide flexibility in implementing equity awards, including incentive stock options, non-qualified stock options, restricted stock grants, unrestricted stock grants and restricted stock units and stock bonuses and performance-based awards. On December 18, 2017, the Company stockholders approved the 2017 Plan, under which the Company was initially permitted to issue up to 1,500,000 shares of the Company's common stock.

On June 24, 2020, the Company amended the 2017 Plan to increase the maximum number of shares of common stock with respect to one or more Stock Awards (as defined in the 2017 Plan) that may be granted to any one participant under the 2017 Plan during any calendar year from 500,000 shares to 1,000,000 shares. The amendment did not increase the total number of shares of common stock authorized for issuance under the 2017 Plan, and did not require stockholder approval.

On May 19, 2021, the Company's stockholders approved the Company's proposal to increase the number of shares authorized for issuance under the 2017 Plan from 1,500,000 shares to 3,000,000 shares of common stock of the Company pursuant to the terms and conditions of the 2017 Plan. The amendment took effect upon receipt of stockholder approval. As of December 31, 2022, the Company has 429,911 shares of common stock remaining for issuance under the 2017 Plan.

The exercise price per share for options under the 2011 Plan, 2015 Plan and 2017 Plan is determined by the Company's board of directors, provided that for incentive stock options the exercise price shall not be less than the fair market value of the Company's common stock on the date of grant, except that for incentive options granted to an owner/employee with a greater than 10% ownership interest in the Company, the exercise price shall not be less than 110% of the fair market value of the Company's common stock on the date of grant.

Options under the plans expire no more than ten years after the date of grant, or within five years after the date of the grant for incentive options granted to an owner/employee with a greater than 10% ownership interest in the Company.

Effective June 24, 2020, the Company entered into an employment agreement with Mr. Raun to serve as the Company's president and chief executive officer. Pursuant to the terms of the employment agreement, Mr. Raun is entitled to receive 412,125 RSUs that shall vest over three years, with one third of the RSUs vesting following the one-year anniversary of the date of grant, and the remaining RSUs vesting in four equal installments, commencing six months after the one-year anniversary of the date of grant and every six months thereafter until fully vested; and 412,125 Incentive Stock Options ("ISOs") pursuant to the Company's 2017 Equity Incentive Plan, whereby the exercise price for the ISOs shall be no less than the fair market value of the Company's common stock at the date of grant ($2.14).

The ISOs shall vest at the end of each the second and fourth quarters, the price of the Company's common stock as of the end of quarter two or quarter four, as applicable, shall be determined using the ten-day trailing volume weighted average price ("VWAP") after reporting of quarter two and quarter four earnings, as applicable. The date of each such determination shall be referred to as a "Determination Date." If on any Determination Date the Company's stock price has increased from the prior Determination Date, then a portion of the ISOs shall become vested. The number of ISOs that shall become vested on a Determinate Date is determined as follows: ((Price at Determination Date – Price at prior Determination Date) x 100) * 1,177.52 = Vested ISOs. If on any Determination Date the Company's stock price is $5.50 per share, all ISOs shall immediately become vested. As of December 31, 2021, Mr. Raun's ISOs are fully vested, but not exercised, based upon achievement of the specified performance objectives.

In the event, that Mr. Raun's employment agreement is terminated for a reason other than "good cause" or for "good reason" Mr. Raun, upon executing an effective waiver and release of claims, unvested RSUs shall accelerate so that an additional twelve (12) months of RSUs shall vest from the termination date.

A summary of stock option activity under the plans during the years ended December 31, 2022 and 2021, are as follows:

	Stock Options Outstanding					
	Number of Shares		Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)		Aggregate Intrinsic Value
Outstanding on January 1, 2021	1,320,267	$	1.81	6.43	$	2,889,274
Granted	-	$	-		$	-
Forfeited / Canceled	(13,772)	$	2.66		$	(28,359)
Exercised	(280,996)	$	1.05		$	(1,096,540)
Outstanding on December 31, 2021	1,025,499	$	2.01	6.35	$	3,014,448
Granted	-	$	-	-	$	-
Forfeited / Canceled	(1,000)	$	2.43		$	(580)
Exercised	(53,819)	$	0.78		$	(119,833)
Outstanding on December 31, 2022	970,680	$	2.07	5.61	$	988,197
Exercisable on December 31, 2022	969,010	$	2.07	5.61	$	987,679
Vested and expected to vest on December 31, 2022	970,680	$	2.07	5.61	$	988,197

The following table summarizes information about common stock options outstanding as of December 31, 2022:

		Stock Options Outstanding				Stock Options Exercisable			
Plan	Exercise Price Range	Number of Shares Outstanding	Weighted Average Remaining Contractual Life (in years)		Weighted Average Exercise Price	Number of Shares Exercisable	Weighted Average Remaining Contractual Life (in years)		Weighted Average Exercise Price
2011	$0.46-$0.80	72,848	1.54	$	0.46	72,848	1.54	$	0.46
2015	$1.08-$1.95	334,611	4.04	$	1.77	334,611	4.04	$	1.77
2017	$2.14-$4.09	563,221	7.06	$	2.45	561,551	7.06	$	2.45
		970,680				969,010			

The following table presents details of the assumptions used to calculate the weighted-average grant date fair value of common stock options granted by the Company. There were no options granted during the year ended December 31, 2022.

	For the Year Ended December 31,			
		2022		2021
Expected term (in years)		-		-
Expected volatility		0.00%		0.00%
Risk-free interest rate		0.00%		0.00%
Weighted average grant date fair value per share	$	-	$	-
Grant date fair value of options vested	$	839,409	$	185,818
Intrinsic value of options exercised	$	119,833	$	1,096,540

As of December 31, 2022, the amount of unearned stock-based compensation estimated to be expensed through 2023 related to unvested common stock options is $849, net of estimated forfeitures. The weighted-average period over which the unearned stock-based compensation is expected to be recognized is 0.11 years.

If there are any modifications or cancellations of the underlying unvested awards, the Company may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense or calculate and record additional expense. Future stock-based compensation expense and unearned stock-based compensation will increase to the extent that the Company grants additional common stock options or other stock-based awards.

Exercise of Stock Options

During the year ended December 31, 2022, the Company issued 53,819 shares of common stock for proceeds of $42,162 in cash related to the exercise of employee and director stock options.

During the year ended December 31, 2021, the Company issued 280,996 shares of common stock for proceeds of $294,390 in cash related to the exercise of stock options.

Restricted Stock Units

Restricted stock units may be granted at the discretion of the compensation committee of the board of directors under the 2017 Plan in connection with the hiring and retention of personnel and are subject to certain conditions. Restricted stock units generally vest quarterly over a period of three years and are typically forfeited if employment is terminated before the restricted stock unit vest. The compensation expense related to the restricted stock units is calculated as the fair value of the common stock on the grant date and is amortized to expense over the vesting period and is adjusted for estimated forfeitures.

The Company's restricted stock unit activity for the years ended December 31, 2022 and 2021, was as follows:

	Restricted Stock Units		
	Number of Shares		Weighted Average Grant Date Fair Value
Unvested on January 1, 2021	575,922	$	2.65
Granted	432,196	$	5.76
Vested	(398,193)	$	3.18
Canceled	(5,125)	$	5.88
Unvested on December 31, 2021	604,800	$	4.49
Granted	684,300	$	3.92
Vested	(379,657)	$	4.15
Canceled	(1,936)	$	4.57
Unvested on December 31, 2022	907,507	$	4.07

During the years ended December 31, 2022 and 2021, the Company issued 222,130 and 254,954 restricted stocks units, net of 88,838 and 143,239 units, respectively, which were retained for income tax purposes. As of December 31, 2022, there was $2,657,469 of unrecognized compensation cost related to unvested restricted stock units which is expected to be recognized over a weighted average period of 1.09 years.

Stock-based compensation expense for the years ended December 31, 2022 and 2021, was comprised of the following:

	For the Year Ended December 31,			
Stock-based compensation classified as:		2022		2021
General and administrative	$	1,111,129	$	1,094,036
Production		269,079		190,330
Marketing and selling		396,187		270,311
Research and development		214,722		140,428
	$	1,991,117	$	1,695,105

<u>Warrants</u>

In connection with the issuance of notes payable and related notes payable in April 2019, the Company issued warrants to purchase shares of common stock at an exercise price of $2.15 per share to the debt holders. See Note 9.

The following table summarizes the Company's warrant activity during the years ended December 31, 2022 and 2021:

	Number of Warrants		Weighted Average Exercise Price
Warrants outstanding on December 31, 2020	505,946	$	5.00
Warrants granted	-	$	-
Warrants exercised	(54,834)	$	1.96
Warrants outstanding on December 31, 2021	451,112	$	5.37
Warrants granted	-	$	-
Warrants exercised	-	$	-
Warrants outstanding on December 31, 2022	451,112	$	5.37

S-8 Registration Statement

On June 21, 2021, the Company filed a Form S-8 Registration Statement relating to 3,543,114 shares of the Company's common stock, par value $0.0001 per share, issuable to the employees, officers, directors, consultants and advisors of the Company under the Company's 2017 Plan, One Stop Systems, Inc. 2015 Stock Option Plan, and One Stop Systems, Inc. 2011 Stock Option Plan.

NOTE 11 – EMPLOYEE BENEFIT PLAN

The Company has a 401(k) retirement plan. Under the terms of the plan, eligible employees may defer up to 20% of their pre-tax earnings, subject to the Internal Revenue Service annual contribution limit. Additionally, the plan allows for discretionary matching contributions by the Company. Typically, the matching contributions are 100% of the employee's contribution up to a maximum of 5% of the employee's annual compensation. During the years ended December 31, 2022 and 2021, the Company contributed $367,124 and $253,148, respectively to the 401(k) Plan. As of May 2020, the Company suspended matching contributions to the 401(k) as part of its cost containment program; however, the program was reinstated in April 2021.

In 2021, OSS Europe instituted an occupational retirement provision for their employees in Germany, which supplements the statutory pension insurance. Currently, this program allows employees to contribute at a maximum 564 Euros per month with the employer match of up to 50% to the employees' insurance retirement fund. During the years ended December 31, 2022 and 2021, the Company contributed $57,605 and $56,741, respectively.

NOTE 12 – COMMITMENTS AND CONTINGENCIES

Legal

We are subject to litigation, claims, investigations, and audits arising from time to time in the ordinary course of our business.

Guarantees and Indemnities

The Company has made certain indemnities, under which it may be required to make payments to an indemnified party, in relation to certain transactions. The Company indemnifies its directors, officers, employees and agents to the maximum extent permitted under the laws of the State of Delaware. In connection with its facility lease, the Company has indemnified its lessor for certain claims arising from the use of the facilities. Also, in connection with the terms of OSS Europe's credit agreements (Note 9), OSS Europe alone has agreed to indemnify its lenders and others related to the use of the proceeds and other matters. The duration of the indemnities varies, and in many cases is indefinite. These indemnities do not provide for any limitation of the maximum potential future payments the Company could be obligated to make. Historically, the Company has not been obligated to make any payments for these obligations and no liabilities have been recorded for these indemnities in the accompanying consolidated balance sheets.

Purchase Commitments

In the normal course of business, the Company may enter into purchase commitments for inventory components to be delivered based upon non-cancellable, pre-established, delivery schedules that are over a period that may exceed one year. Total non-cancellable open purchase orders as of December 31, 2022, were approximately $15,722,323.

The following table presents minimum rental commitments under all non-cancellable operating leases with initial lease terms in excess of one year are as follows as of December 31, 2022:

Year	Operating Leases
2023	$ 606,274
2024	412,771
Total lease payments	1,019,045
Less: Amount representing interest	(85,208)
Present value of lease payment	933,837
Less: current portion of operating lease obligation	(536,588)
Operating lease obligation, net of current portion	$ 397,249

N0TE 13 LEASES

Leases

The Company leases its offices, manufacturing, and warehouse facility in San Diego County under a non-cancellable operating lease. Our corporate headquarters are in a leased space comprising of approximately 29,342 square feet in Escondido, California under a lease that was modified in February 2019 and expires in August 2024. The Company also leases a 3,208 square foot facility in Salt Lake City, Utah expiring in June 2023, that houses our Ion software development team. Additionally, we lease a 1,632 square foot facility located in Anaheim, California, with the lease expiring in June 2023. OSS Europe leases space comprising of 8,073 square feet on a month-to-month basis. For the years ended December 31, 2022 and 2021, rent expense was $684,224 and $773,157, respectively.

In addition to leases for physical facilities the Company also leases certain office equipment and vehicles. For the years ended December 31, 2022 and 2021, lease expenses, excluding office leases, was $59,846 and $64,936, respectively.

Other information related to leases as of the year ended December 31, 2022 are as follows:

		For the Year Ended December 31, 2022
Operating lease cost	$	644,120
Total lease cost	$	644,120
Cash paid for amounts included in the measurement of operating lease liabilities:		
Operating cash flows from operating leases	$	636,990
Right-of-use assets obtained in exchange for new operating lease liabilities	$	-
Weighted-average remaining lease term - operating leases		20.2 months
Weighted-average discount rate - operating leases		12.8%

NOTE 14 – RELATED PARTY TRANSACTIONS

In April 2019, certain members of the Company's Board of Directors executed definitive agreements to commit funds of up to $4,000,000 as a credit facility. The Company initially borrowed an aggregate of $1,150,000 from members of the Board of Directors and an aggregated of $350,000 from other shareholders for a two-year period at an interest rate of 9.5% which required the Company to make monthly principal and interest payment of $69,000 per month. In connection with these loans, the Company issued to these note holders, warrants to purchase shares of the Company's common stock equal to 10% of the original principal at a price per share equal to $2.15. Accordingly, the Company issued to these note holders warrants to purchase an aggregate of 69,766 shares of the Company's common stock. The relative fair value of the warrants issued was $60,158. The remaining unfunded commitments expired as of April 1, 2020, and the Company has not received any additional funding commitments from members of the Board of Directors. Interest expense on all related-party notes payable for the years ended December 31, 2022 and 2021, totaled $0 and $4,095, respectively.

The Company has appointed certain stockholders to the Board of Directors. Director fees paid by the Company, including stock-based compensation, for the years ended December 31, 2022 and 2021, totaled $528,146 and $535,768, respectively, and are included in general and administrative expenses in the accompanying consolidated statements of operations.

NOTE 15 – INCOME TAXES

For the years ended December 31, 2022 and 2021, pre-tax (loss) income was attributed to the following jurisdictions:

	For the Year Ended December 31, 2022	2021
Domestic operations	$ (292,325)	$ 1,248,943
Foreign operations	2,486,867	1,689,505
	$ 2,194,542	$ 2,938,448

The components of the tax provision for income taxes is as follows:

	For the Year Ended December 31, 2022	2021
Current:		
Federal	$ -	$ -
State	29,695	2,763
International	612,198	548,062
	641,893	550,825
Deferred:		
Federal	2,345,612	(81,341)
State	1,436,092	136,191
International	-	-
	3,781,704	54,850
Total provision for income taxes	$ 4,423,597	$ 605,675

Taxes on income vary from the statutory federal income tax rate applied to earnings before tax on income as follows:

	For the Year Ended December 31, 2022	2021
Provision at federal statutory rates (21% applied to earnings before income taxes)	$ 461,219	$ 617,074
State income taxes, net of federal benefit	21,044	(105)
Other permanent items	(78,847)	(60,997)
PPP loan forgiveness	-	(318,014)
Stock based compensation	31,815	(399,635)
Research and development credits	60,734	(247,264)
Amortization of intangibles	7,410	112,007
Change in reserve for uncertain tax positions	(26,307)	771,672
Change in valuation allowance	3,805,149	-
Other	141,380	130,937
	$ 4,423,597	$ 605,675

Deferred income tax assets and liabilities arising from differences accounting for financial statement purposes and tax purposes, less valuation reserves at yearend are as follows:

	For the Year Ended December 31,	
	2022	2021
Deferred tax assets:		
Reserves	$ 58,789	$ 51,147
Deferred compensation	150,681	246,542
Stock compensation	395,198	238,310
Deferred revenue	109,361	64,232
Inventories	221,323	184,802
Credits and loss carryforward	3,412,820	4,202,769
Capitalized research and experimental expenditures	700,920	-
Lease liabilities	181,177	-
Total deferred tax assets before valuation allowance	5,230,269	4,987,802
Deferred tax liabilities:		
Property and equipment	(338,739)	(300,758)
Intangible assets	(641,493)	(593,254)
Other	(308,047)	(303,271)
ROU assets	(126,016)	-
Total deferred tax liabilities	(1,414,295)	(1,197,283)
Net deferred tax assets before valuation allowance	3,815,974	3,790,519
Valuation allowance	(3,954,636)	(149,487)
Net deferred tax (liabilities) assets	$ (138,662)	$ 3,641,032

The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those differences become deductible. Management considers the scheduled reversals of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. As of the year ended December 31, 2022, Management believes that it is not more likely than not that the Company will realize the benefits of the net deferred tax assets and has recorded a valuation allowance against its US deferred tax assets.

The Company files income tax returns in the U.S. federal jurisdiction, Arizona, Arkansas, California, Idaho, Massachusetts, Texas, and Utah and Germany and has open tax statutes for U.S. federal taxes for the years ended December 31, 2019 through 2022. For California, the open tax statutes are for years December 31, 2018 through 2022, and for Germany, the open years include December 31, 2020 through 2021.

The Company had Federal net operating loss ("NOL") carryforwards as of December 31, 2022, of approximately $4,399,000. The Company may use these NOL carryforwards indefinitely to offset 80% of Federal taxable income in future years. In addition, the Company has state NOL carryforwards of $4,115,000. State NOLs will carryforward through at least 2040 and may be used to offset future state taxable income.

As of December 31, 2022 and 2021, the Company had $1,619,000 and $1,804,000 respectively, of federal tax credit carryforwards which begin to expire in 2026 and state credit carryforwards of $1,700,000 and $1,668,000, respectively, which carryforward indefinitely.

As of December 31, 2022, unrecognized tax benefits associated with uncertain tax positions was $1,218,396, of which $20,200 is included in other accrued expenses and other liabilities, while $1,188,744 is included as a direct reduction on the net deferred tax assets on the accompanying consolidated balance sheets. If recognized, this would affect the Company’s effective tax rate.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

Unrecognized tax benefits balance on December 31, 2020	$	371,688
Gross increases for tax positions of the prior year		762,124
Gross increases for tax positions of the current year		108,905
Unrecognized tax benefits balance on December 31, 2021		1,242,717
Gross increases for tax positions of the prior year		-
Gross decrease for tax positions of the current year		(49,479)
Gross increases for tax positions of the current year		25,158
Unrecognized tax benefits balance on December 31, 2022	$	1,218,396

NOTE 16 –NET (LOSS) INCOME PER SHARE

Basic and diluted net (loss) income per share was calculated as follows for the years ended December 31, 2022 and 2021:

	For the Year Ended December 31, 2022	2021
Basic and diluted net (loss) income per share:		
Numerator:		
Net (loss) income	$ (2,229,055)	$ 2,332,773
Denominator:		
Weighted average common shares outstanding - basic	19,730,698	18,305,878
Effect of dilutive securities	-	1,197,859
Weighted average common shares outstanding - diluted	19,730,698	19,503,737
Net (loss) income per common share:		
Basic	$ (0.11)	$ 0.13
Diluted	$ (0.11)	$ 0.12

In 2022 and 2021, there were 380,000 warrants that are convertible to common stock that were excluded as these were antidilutive.

NOTE 17 – SEGMENT AND GEOGRAPHIC INFORMATION

The Company operates in two reportable segments: the design and manufacture of high-performance customized computers and flash arrays, in-flight entertainment & connectivity, and value-added reseller with minimal customization. The Company evaluates financial performance on a Company-wide basis.

Segment detail for the years ended December 31, 2022 and 2021, is as follows:

	For the Year Ended December 31, 2022			For the Year Ended December 31, 2021		
	OSS	OSS Europe	Total	OSS	OSS Europe	Total
Revenues	$ 43,286,715	$ 29,134,630	$ 72,421,345	$ 38,492,004	$ 23,490,100	$ 61,982,104
Cost of revenues	(29,142,852)	(22,880,884)	(52,023,736)	(24,272,292)	(18,070,523)	(42,342,815)
Gross profit	14,143,863	6,253,746	20,397,609	14,219,712	5,419,577	19,639,289
Gross profit %	32.7%	21.5%	28.2%	36.9%	23.1%	31.7%
Total operating expenses	(15,182,546)	(3,646,735)	(18,829,281)	(14,181,739)	(3,710,523)	(17,892,262)
(Loss) income from operations	$ (1,038,683)	$ 2,607,011	$ 1,568,328	$ 37,973	$ 1,709,054	$ 1,747,027

Revenue from customers with non-U.S. billing addresses represented approximately 69%% and 67% of the Company’s revenue for the years ended December 31, 2022 and 2021, respectively.

As of December 31, 2022, substantially all the Company’s long-lived assets were located in the United States of America, with the exception of assets of $206,980 located in Germany.

NOTE 18 – SUBSEQUENT EVENTS

In February 2023, the Company’s board of directors constituted a new committee of the board, the Strategic Transition Committee, to assist in the identification, transition and retention of a successor chief executive officer, including to work with the engaged search firm to accomplish the foregoing, to provide support to our management team throughout the transition, and to perform other duties as may be necessary or desirable from time to time in connection with the reorganization of the Company. Members of the Strategic Transition Committee consist of Jack Harrison (chair of the committee), Gioia Messinger and Kenneth Potashner. As compensation for the services that they are expected to perform as members of the Strategic Transition Committee (i) Mr. Harrison and Ms. Messinger shall be entitled to receive $2,000 per month in cash, commencing January 1, 2023 and continuing for so long as the Strategic Transition Committee remains in effect, which cash payments shall be paid to each of the relevant members in one lump sum at or about such time that the Strategic Transition Committee is disbanded, and (ii) Mr. Potashner shall be entitled to receive (A) 3,333 shares of Company common stock per month, commencing November 1, 2022 and continuing for so long as the Strategic Transition Committee remains in effect, which shares shall be issued to Mr. Potashner in one grant at or about such time that the Strategic Transition Committee is disbanded, and (B) a one-time cash payment equal to 30% of the total value of the shares issued to Mr. Potashner to cover taxes payable in connection with the issuance of such shares.

The €500,000 note payable to VR Bank due February 1, 2023, was extended to July 31, 2023, and the interest rate was increased to 4.76%.

The €500,000 note payable to UniCredit Bank due February 16, 2023, was extended to August 16, 2023, and the interest rate was increased to 4.70%.

Exhibit Index

Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
2.1	Agreement and Plan of Merger and Reorganization, dated August 22, 2018, with Concept Development Inc.	8-K	001-38371	2.1	September 6, 2018	
2.2	Share Purchase Agreement, dated October 31, 2018, with Bressner Technology GmbH.	8-K	001-38371	2.1	November 6, 2018	
3.1	Amended and Restated Certificate of Incorporation (currently in effect).	8-K/A	001-38371	3.1	March 21, 2018	
3.2	Bylaws, as amended (currently in effect).	8-K	001-38371	3.2	February 6, 2018	
4.1	Description of Capital Stock	10-K	001-38371	4.1	March 24, 2022	
4.2	Second Amended and Restated Investors' Rights Agreement, dated January 2007.	S-1	333-222121	4.2	December 18, 2017	
4.3	Common Shareholder Piggyback Registration Rights Agreement, dated July 15, 2016.	S-1	333-222121	4.3	December 18, 2017	
10.1+	Form of Indemnification Agreement between One Stop Systems, Inc. and each its directors and executive officers.	S-1/A	333-222121	10.1	January 16, 2018	
10.2+	One Stop Systems, Inc. 2000 Stock Option Plan and related form agreements.	S-1	333-222121	10.2	December 18, 2017	
10.3+	One Stop Systems, Inc. 2011 Stock Option Plan and related form agreements.	S-1	333-222121	10.3	December 18, 2017	
10.4+	One Stop Systems, Inc. 2015 Stock Option Plan and related form agreements.	S-1	333-222121	10.4	December 18, 2017	
10.5+	One Stop Systems, Inc. 2017 Stock Equity Incentive Plan and related form agreements.	S-1	333-222121	10.5	December 18, 2017	
10.6+	Amendment No. 1 to the 2017 Stock Equity Incentive Plan.	8-K	001-38371	10.2	June 25, 2020	
10.7+	Amendment No. 2 to the 2017 Stock Equity Incentive Plan.	10-Q	001-38371	10.7	August 12, 2021	
10.8	Lease Agreement dated October 21, 2004, as amended.	S-1/A	333-222121	10.9	January 16, 2018	
10.9	Piggyback Registration Rights Agreement by and between One Stop Systems, Inc. and James M. Reardon, dated August 31, 2018.	8-K	001-38371	10.1	September 6, 2018	
10.10	Employment Agreement between One Stop Systems, Inc., and David Raun, dated June 24, 2020.	8-K	001-38371	10.1	June 25, 2020	

10.11	Form of Senior Secured Convertible Promissory Note.	8-K	001-38371	4.1	April 21, 2020	
10.12	Form of Securities Purchase Agreement, dated April 20, 2020, by and between the Company and the investors.	8-K	001-38371	10.1	April 21, 2020	
10.13	Form of Security Agreement, dated April 20, 2020, by and between the Company, certain of its subsidiaries and the investors.	8-K	001-38371	10.2	April 21, 2020	
10.14	Form of Intercreditor Agreement, dated April 20, 2020, by and between the Company, the investors and certain secured parties.	8-K	001-38371	10.3	April 21, 2020	
10.15	Senior Secured Convertible Promissory Note, dated April 24, 2020, by and between the Company and the investor.	8-K	001-38371	4.2	April 24, 2020	
10.16	Promissory Note, dated as of April 28, 2020, by and between One Stop Systems, Inc., as Borrower, and Cache Valley Bank, as Lender.	8-K	001-38371	10.1	May 15, 2020	
10.17	Form of Securities Purchase Agreement.	8-K	001-38371	10.1	March 3, 2021	
21.1	Company Organizational Structure					X
23.1	Haskell & White Consent					X
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					*
32.2	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					*
101 INS	Inline XBRL Instance Document					**
101 SCH	Inline XBRL Taxonomy Extension Schema Document					**

101 CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	**
101 LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	**
101 PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	**
101 DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	***
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101 attachments)	**

* Furnished herewith.

** The XBRL related information in Exhibit 101 shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to liability of that section and shall not be incorporated by reference into any filing or other document pursuant to the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing or document.

+ Indicates management contract or compensatory plan.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Annual Report to be signed on its behalf by the undersigned, thereunto duly authorized**.**

ONE STOP SYSTEMS, INC.

Date: March 23, 2023

By: /s/ David Raun
David Raun
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Annual Report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Name	Title	Date
/s/ David Raun **David Raun**	President and Chief Executive Officer (Principal Executive Officer) and Director	March 23, 2023
/s/ John W. Morrison Jr. **John W. Morrison Jr.**	Chief Financial Officer (Principal Accounting and Financial Officer)	March 23, 2023
/s/ Kenneth Potashner **Kenneth Potashner**	Chairman	March 23, 2023
/s/ Kimberly Sentovich **Kimberly Sentovich**	Director	March 23, 2023
/s/ Sita Lowman **Sita Lowman**	Director	March 23, 2023
/s/ Jack Harrison **Jack Harrison**	Director	March 23, 2023
/s/ Gioia Messinger **Gioia Messinger**	Director	March 23, 2023
/s/ Greg Matz **Greg Matz**	Director	March 23, 2023