2020ANNUAL REPORT & PROXY STATEMENT

Letter to Shareholders

2020 Annual Report on Form 10-K

Notice of 2021 Annual Meeting & Proxy Statement





Programming for a secure and connected world.

Dear Data I/O Shareholder:

We just completed one of the most unique and challenging years in our nearly 50-year history at Data I/O. In 2020, we had to react suddenly to the global COVID-19 pandemic. COVID-19 impacted all aspects of our business, from customer demand, supply chain integrity, employee safety, business processes, and financial management. As a global company, we had to manage each of these while working within the guidelines of local and national policy in the USA, China and Germany.

Our philosophy at the start of the outbreak was simple. First, we must keep our people and their families safe. Second, we must keep our facilities safe and operational while we serve our customers as an essential business. Finally, we must preserve cash, both as a buffer for the duration of the downturn and for fueling the eventual rebound.

We managed this challenge successfully to date, with no known employee transmissions in the workplace, and preservation of our working capital throughout the year. Senior Management and Directors took a 20% pay reduction for two quarters along with other cost containment measures to preserve our cash. Our resilient supply chain model kept our facilities open and serving customers globally. We supported customers rapidly transitioning to producing medical devices. We did this while facing unique international travel restrictions, shipping delays, and the inability to meet with customers in person. We also discovered several interesting opportunities to re-engineer some business practices to become more effective and efficient in the years to come.

We are very thankful for the health of our staff, our customers, our partners and their families, as we recognize the sacrifices made by health care professionals and first responders around the world. The entire global team at Data I/O has been truly remarkable and we personally commend them for a job well done.

In 2020, we continued our R&D innovations across multiple products, completing many advancements for our PSV family of products and extending our lead in the automotive electronics programming industry. We also made fundamental progress on our SentriX[®] Platform with the introduction of our next generation SentriX system architecture and the SentriX Product Creator™ software tool suite. The next generation SentriX Platform simplifies end-to-end the provisioning and deployment of robust IoT and automotive security and enables an outsourced as-a-Service business model. SentriX Product Creator is a powerful software suite that enables OEMs to securely, quickly and easily define the security deployment for their products and to securely deliver their product security definitions and secrets to SentriX-enabled production facilities remotely. These innovations are allowing us to "Simplify and Scale" our security business. With this release, we now have developed and control the critical Intellectual Property for security provisioning within SentriX.

We also innovated for our automotive customers. We support the latest UFS memory products for the infotainment market. We also continue to win new customers in the rapidly growing EV market, while extending our geographical reach as the automotive industry grows in new countries and markets worldwide. Industry analysts are forecasting a 10-15% compounded annual growth rate for automotive electronics over the next decade.

As a Data I/O shareholder, you are investing first and foremost in a resilient organization that is well capitalized and accustomed to rapid change and cyclicality. In 2021 we plan to transition from the depths of COVID-19 to robust multi-year growth led by our automotive business worldwide.

We appreciate your continued support of Data I/O.

Sincerely,

Anthony Ambrose, CEO

Alan Howe, Chair

Postscript from Data I/O CEO Anthony Ambrose:

As Data I/O moves closer to realizing its next phase of growth, we recognize Alan Howe, my co-author of this letter, who will not seek election for another term on the Board of Directors and will be stepping down as our Chair at our 2021 annual shareholder meeting. On behalf of all shareholders, I would like to thank Alan for his eight years of board service and wish him well in his future endeavors.

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

(Mark One)

FORM 10-K

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For the	e fiscal year ended Decemb	er 31, 2020		
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For the	e transition period from			
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		-	CORPORATION	
		(Exact name of registi	rant as specified in its charter)	
	Washin	•	91-0864123	
	(State or other jurisdict	ion of incorporation)	(I.R.S. Employer Identification No.)	
	66	45 185 th Ave NE, Suite 10	00, Redmond, Washington, 98052	
		•) 881-6444	
	(Address, including zip	code, of registrant's principle	executive offices and telephone number, including area cod	e)
	:	Securities registered purs	suant to Section 12(b) of the Act	
	Title of each class	Trading Symbol(s)	Name of each exchange on which register	ed
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Shares of Common Stock, no par value, outstanding as of March 22, 2021:

8,421,599

Aggregate market value of voting and non-voting common equity held by non-affiliates on the registrant as of June 30, 2020: \$27,952,330

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement relating to its May 20, 2021 Annual Meeting of Shareholders are incorporated into Part III of this Annual Report on Form 10-K.

DATA I/O CORPORATION FORM 10-K

For the Fiscal Year Ended December 31, 2020

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Item 1. Business

This Annual Report on Form 10-K and the documents incorporated herein by reference contain forward-looking statements based on current expectations, estimates and projections about Data I/O Corporation's industry, management's beliefs and certain assumptions made by management. See "Management's Discussion and Analysis of Financial Condition and Results of Operations – Forward Looking Statements."

General

Data I/O Corporation ("Data I/O", "We", "Our", "Us") is a global market leader for advanced programming, security deployment, security provisioning and associated Intellectual Property ("IP") protection and management solutions used in electronics manufacturing with flash memory, microcontrollers, and flash memory-based intelligent devices as well as secure element devices, authentication devices and secure microcontrollers. We collectively refer to IP protection, security provisioning of devices, provisioning of security into devices, and related services such as cloud onboarding and device and provisioning documentation management as "security deployment". Data I/O* designs, manufactures and sells programming and security deployment systems and services for electronic device manufacturers, specifically targeting high-growth areas such as high-volume users of flash memory and flash memory-based microcontrollers. Most electronic products today incorporate a number of programmable semiconductor devices that contain data, operating instructions and security credentials essential for the proper operation of the product and more and more products require security deployment.

Our mission is to bring the world's electronic devices to life. Programmable devices are used in products such as automobile electronics, smartphones, HDTV, tablets, gaming systems and a broad category called Internet of Things ("IoT"). IoT is a broad term that addresses the interconnectivity of devices and other electronic or smart products. Our solutions, some of which include security deployment and process control capabilities, enable us to address the demanding requirements of the electronic device market, where applications security and IP protection are essential to our customer's success. Our largest customers are heavy users of programmable semiconductor devices and include original equipment manufacturers ("OEMs") in automotive electronics, consumer electronics and IoT markets as well as their programming center partners and electronic manufacturing service ("EMS") contract manufacturers.

Data I/O was incorporated in the State of Washington in 1969 and its business was founded in 1972. Our website address is www.dataio.com.

COVID-19

In 2020, we had to react to the global COVID-19 pandemic. COVID-19 has impacted all aspects of our business, from customer demand, to supply chain integrity, employee safety, business processes, and financial management. As a global company, we had to manage each of these while working within the guidelines of local and national policy in the U.S., China and Germany. Our philosophy at the start of the outbreak was simple:

- 1. Keep our people and their families safe;
- 2. Keep our facilities safe and operational while we serve our customers as an essential business; and
- 3. Preserve cash.

We have managed this issue successfully to date, with no known employee transmissions in the workplace and significant preservation of our cash and working capital throughout the year. Our resilient supply chain model kept our facilities in Shanghai, China and Redmond, Washington open, and serving customers globally. We supported customers rapidly transitioning to medical device support. We did this while facing unique international travel restrictions, shipping delays, and inability to meet with customers in person. All the while we preserved and slightly grew our cash balances, while moving more cash to the U.S.

COVID-19 has continued to impact our demand, particularly capacity related, evidenced by many automotive and other plant shut downs in the second quarter, their re-openings and now, in a believed ripple effect, the impact of chip shortages on their production plans. This appears to be a short-term issue and the outlook for automotive electronics remains strong for a decade. Waves of COVID-19 infection rates have kept or re-imposed revised travel restrictions. Customers largely have not permitted inperson sales and other visits. Converting these interactions to remote and virtual means has meant new processes and technology usage.

In production, in addition to adding protective health measures for our employees, we have focused on supply chain resilience and duplicating production capability for some products in both our Shanghai, China and Redmond, USA facilities. We implemented additional supplier financial and other monitoring, as well as adding additional local suppliers and increasing inventory stock levels of key parts. Other than production employees who necessarily are onsite, most Redmond employees are working remotely with some flexibility to be onsite and this is expected to continue until COVID-19 risks are reduced by vaccination coverage.

Industry Background

We enable companies to improve productivity, increase supply-chain security and reduce costs by providing device data programming and security deployment solutions that allow our customers to take IP (large design and data files) and protect and program it into memory, microcontroller and logic devices quickly and cost-effectively. We also provide services related to hardware support, system installation and repair, and device programming. Companies that design and manufacture products utilizing programmable electronic devices, ranging from automobiles to cell phones, purchase programming solutions from us. Trends of increasing device densities, shrinking device packages, increased demands for security, and customers increasing their software content file sizes, combined with the increasing numbers of intelligent devices such as automotive electronics and IoT applications, are driving demand for our solutions.

Traditionally, our programming market opportunity focused on the number of semiconductor devices to be programmed, but because of the rapid increase in the density of devices, and increasing demands for supply-chain security, the focus has shifted in many cases from the number and type of devices to the number and type of bits per device to be programmed or securely provisioned. With expected growth in IoT applications, the business opportunity for this market differentiates on quality, security and automation.

Some of our automated programming systems integrate data programming, automated handling functions and/or security deployment into a single product solution. During 2020, we continued to simplify and integrate security deployment into some of our solutions. Quality and security-conscious customers, particularly those in high-volume manufacturing and programming, drive this portion of our business.

Products

To accommodate the expanding variety and quantities of programmable devices being manufactured today, we offer multiple solutions for the numerous types of device mix and volume usage by our customers in the various market segments and applications. We work closely with leading manufacturers of programmable devices to develop our products to meet the requirements of a particular device. Our newer products are positioned and recognized as some of the most advanced programming and security deployment solutions.

Our programming solutions include a broad range of products, systems, modules and accessories, grouped into two general categories: automated programming systems and manual programming systems. We provide two categories of automated programming systems: off-line and in-line. Our PSV family of automated programming systems delivers a broad range of programming capacity and capability to the marketplace. Our recently announced PSV2800 Automated Programming System focuses on dedicated high-volume manufacturing in a lower cost platform. Our PSV7000 Automated Programming System continues to be well adopted in the marketplace, in particular for automotive electronics customers and as a base for security deployment upgrades. Our PSV5000 automated programming system combines mid-range capacity and flexibility with competitive pricing. Our PSV3000 Automated Programming System, developed for the Asian automation market, is a lower cost platform for basic programming needs. Our PSV family of handlers has won multiple industry awards for technical excellence and innovation. In 2018 our Lumen®X programmer won five industry awards for Universal Flash Storage ("UFS") support. Our ConneX® software won the 2017 Circuits Assembly NPI Award, the EM Asia Innovation Award and the SMT China Vision Award. Our SentriX® security provisioning system won the Global Technology Award at Productronica and the Embedded Award for Innovation at the Embedded World show. Our Job Composer software for LumenX won the Circuits Assembly NPI Award in January 2019 and January 2020. In October 2019 our Job Composer software won the Mexico Technology Award for Device Programming and in November 2019, our PSV2800 won the Global Technology Award at Productronica and in February 2020, the Circuits Assembly NPI Award. In January 2019 and February 2020, Data I/O won the Circuits Assembly Service Excellence Award.

Our automated systems have list selling prices ranging from \$75,000 to \$615,000 and our manual systems have list selling prices ranging from \$10,000 to \$35,000. Our security deployment system, SentriX®, is currently offered for security provisioning on a pay per part use basis along with related fees.

Data I/O programming technology is integrated with the PSV family to create highly-flexible systems that deliver outstanding performance with low total cost of ownership. The LumenX programming engine is the fastest solution available for eMMC and

UFS programming of large NAND FLASH. Increasing memory densities and the need for faster data interfaces are resulting in an expected transition to the use of UFS devices. LumenX is available on our PSV7000 and PSV5000 and as a standalone manual programmer. FlashCORE™, and our universal job setup tool, Tasklink™ for Windows®, are available in each family of our automated programming systems and in FlashPAK™, our manual programming system. The SentriX security system adds security deployment capability to our data programming system. SentriX allows customers of any size and demand-profile to securely add keys, certificates, and other security information to specialized regions of authentication integrated circuits ("ICs"), secure elements and secure microcontrollers. We provide device support and service on all of our products. Device support is a critical aspect of our business and consists of writing software algorithms for devices and developing socket adapters to hold and connect to the device for programming.

Our products have both an upfront solution sale and recurring revenue elements. Adapters are a consumable item and software and maintenance are typically recurring under subscription contracts. Our SentriX system revenue typically comes from per part use fees, set-up or minimum quarterly fees, consumables, non-recurring engineering fees, service fees and the sale of equipment related to SentriX.

Sales Percentage of Total Sales Breakdown by Type				
Sales Type 2020 2019 Drivers				
Equipment Sales	56%	58%	Capacity, Process improvement, Technology	
Adapter Sales	28%	26%	Capacity utilization, New customer products	
Software and Maintenance Sales	16%	16%	Installed base, Added capabilities	
Total	100%	100%		

The table below presents our main products and the key features that benefit our customers:

Products	Key Features	Customer Benefits
PSV Handlers: Off-line (Automated)	 Fast program and verify speeds Up to 112 programming sites Up to 3000 devices per hour throughput UFS Support Supports LumenX and FlashCORE III programmers Supports multiple media types Supports quality options – fiber laser marking, 3D coplanarity ConneX Factory Integration, Job Composer & other Software 	 Managed and secure programming High throughput for high density Flash programming High flexibility with respect to I/O options (tray, tape, tube), marking/labeling and vision for coplanarity inspection
SentriX Security Deployment System	 Unique ability to securely provision keys and certificates one device at a time Pay per use model reduces capital spending requirements as the market develops. 	 Create Secure IoT devices across a global network Maintain IP control over the lifecycle of their products
RoadRunner & RoadRunner3 Series Handlers: In-line, (Automated)	 Just-in-time in-line programming Direct integration with placement machine supporting SIPLACE, Fuji NXT, Panasonic, Universal/Genesis and Assembleon/K&S Factory Integration Software Supports FlashCORE III programmers 	 Dramatic reduction in inventory carrying and rework costs "Zero" footprint Rapid return on investment ("ROI") typically realized in a matter of months Integration with factory systems
LumenX Programmer	 Extensible architecture for fast program, verify and download speeds Supports UFS, microcontrollers, Serial FLASH and other device types Large file size support Secure Job creation 	 Managed and secure programming Fast setup and job changeover Highest yield and low total cost of programming High performance

	8 sockets with tool-less changeover with single socket adapters	
FlashPAK III programmer: (Non-Automated)	 Scalability Network control via Ethernet Stand-alone operation or PC compatible Parallel programming 	 Validate designs before moving down the firmware supply chain Unmatched ease of use in manual production systems
Unifamily programmers: Off-line, Low Volume and Engineering (Non-Automated) (Legacy Equipment)	Breadth of device coverage	 Universal programmer Support for legacy devices

Customers/Markets

We sell our solutions to customers worldwide, many of whom are world-class manufacturers of electronic devices used in a broad range of industries, as described in the following table:

	OEMs		EMS	Programming Centers	
	Automotive Electronics	IoT, Industrial, Consumer Electronics, including Wireless	Contract Manufacturers		
Notable end customers	Borg Warner, Bosch, Alpine, Visteon, Kostal, Harman Becker, Denso, Continental, Panasonic, Magna, Marelli	LG, TCL, Siemens, Danfoss, Philips, Schneider, Endress+Hauser, Insta, Microsoft, Sony, Amazon, UTEC	Pegatron, Flextronics, Jabil, Wistron, Sanmina SCI, Foxconn, Leesys, Calcomp	Arrow, Avnet, BTV, CPS, EPS, Elsil, Elmitech, Noa Leading	
Business drivers	Infotainment, Advanced Driver Assist (ADAS), Electrification, Connectivity and Security	Higher functionality driven by increasing electronic content. Shift from analog to connected intelligent devices, security	Production contract wins	Value-added services, logistics, security	
Programming equipment drivers	Growing Electronic Content, Global Support, Resilient Supply Chains, new product rollouts, growing file sizes, quality control and traceability, security	Growing Electronic Content, need for IP protection. Process improvement and simplification as well as new product rollouts, memory and new technology, security	New contracts from OEMs, programming solutions specified by OEMs	Capacity utilization of their installed base of equipment, small parts handling, security	
Buying criteria	Quality, reliability, configuration control, traceability, global support, IP protection, security	Quality, reliability, configuration control, traceability, global support, IP protection, Security.	Lowest equipment procurement cost, global support	Flexibility, lowest life-cycle cost-per programmed-part, low changeover time; use of multiple vendors provides negotiating leverage, device support availability	
Security Deployment	End customer focus	End customer focus	End customer and partner Focus	Current partner focus of our SentriX deployments	

Our solutions address the data programming of devices and security deployment needs of programmable semiconductor devices. Semiconductor devices are a large, growing market, in terms of devices, bits programmed and need for security. We believe that our sales are driven by many of the same forces that propel the semiconductor industry. We sell to the same firms that buy the semiconductors. When their business grows, they buy more semiconductors which, in turn, require additional programming equipment to maintain production speeds or program new device technologies.

Our device programming solutions currently target two high volume, growing markets: automotive electronics and IoT systems including Industrial and Consumer devices.

Growth drivers for automotive electronics

- Consumers desire advanced car features requiring higher levels of sophistication, including autonomous cars, infotainment options (audio, radio, dashboard displays, navigation), ADAS, wireless connectivity and electrification
- Proliferation of programmable microcontrollers to support the next-generation electronic car systems
- Increasing use of high-density flash to provide memory for advanced applications that require programming
- Increasing complexity to support autonomous vehicles
- Increasing need for security solutions for a secure supply chain and lifecycle firmware integrity

Growth drivers for IoT: including industrial, consumer electronics and wireless

- Securely controlling groups of connected devices through a secure supply chain and lifecycle firmware integrity management
- Adding intelligence and processing into devices
- Connecting previously unconnected devices to networks and the internet (such as smart home, including intelligent thermostats and lighting)
- Emergence of new devices and applications (such as health and wellness wearable devices and applications)

All of the above growth drivers are long term and are likely to be adversely impacted, at least temporarily, due to the global pandemic of COVID-19 in our markets. Annual projections on spending, growth, mix, and profitability are likely to be revised substantially as new information is obtained.

Diversification of accounts receivable and net sales

During 2020, we sold products to approximately 200 customers throughout the world.

The following represented greater than 10% of net sales for the applicable year Percentage of Net Sales

	2020	2019	2018
Number of customers	1	1	2
Approximate percentage of net sales	12%	11%	29%
Percentage of each Percentage of each	12% n/a	11% n/a	16% 13%

The following represented greater than 10% of our consolidated accounts receivable for the applicable year:

Percentage of Consolidated Accounts Receivable

	2020	2019	2018
Number of customers	3	2	3
Approximate percentage of consolidated accounts receivable balance	41%	32%	35%
Percentage of each Percentage of each Percentage of each	17% 12% 12%	17% 15% n/a	12% 12% 11%

Geographic Markets and Distribution

We market and sell our products through a combination of direct sales, internal telesales, indirect sales representatives and distributors, as well as services through programming centers. We continually evaluate our sales channels against our evolving markets and customers and realign them as necessary to ensure that we reach our existing and potential customers in the most effective and efficient manner possible.

U.S. Sales

We market our products throughout the U.S. using a variety of sales channels, including our own field sales management personnel, independent sales representatives and direct telesales. Our U.S. independent sales representatives obtain orders on an agency basis, with shipments made directly to the customer by us. Net sales in the U.S. for 2020, 2019 and 2018 were (in millions) \$1.5, \$1.7 and \$3.4, respectively. Some of our customers' orders delivered internationally are heavily influenced by U.S. sales-based efforts.

International Sales

International sales represented approximately 93%, 92% and 88% of net sales in 2020, 2019 and 2018, respectively. We make foreign sales through our wholly-owned subsidiaries in Germany and China, as well as through independent distributors and sales representatives operating in 45 countries. Our independent foreign distributors purchase our products for resale and we generally recognize the sale at the time of shipment to the distributor. As with U.S. sales representatives, sales made by international sales representatives are on an agency basis, with sales made directly to the customer by us.

Net international sales for 2020, 2019 and 2018 were (in millions) \$18.8, \$19.8 and \$25.8, respectively. We determine international sales by the international geographic destination into which the products are sold and delivered, and include not only sales by foreign subsidiaries but also export sales from the U.S. to our foreign distributors and to our representatives' customers. International sales do not include transfers between Data I/O and our foreign subsidiaries. Export sales are subject to U.S. Department of Commerce regulations. We have not, however, experienced difficulties to date as a result of these requirements. Our products typically do not require export licenses. We have not made sales to Iran or any Iranian governmental entities or any other blacklisted companies or countries.

Fluctuating exchange rates and other factors beyond our control, such as the coronavirus, international monetary stability, tariff and trade policies and U.S. and foreign tax and economic policies, may affect the level and profitability of international sales. We cannot predict the effect of such factors on our business, but we try to consider and respond to changes in these factors, particularly as the majority of our costs are U.S. based while the vast majority of our sales are international.

Competition

The competition in the programming systems market is highly fragmented with a small number of organizations selling directly competitive solutions and a large number of smaller organizations offering less expensive solutions. In particular, low cost automated solutions have gained market share in recent years, where the competition is primarily based on price. Typically, their equipment meets a "good enough" standard, but with reduced quality, traceability, upgradability, security and other software features such as factory integration software. Many of these competitors compete on a regional basis, with local language and support. Although competition in the security deployment market is developing, we expect competition in the market to increase as security deployment becomes more important. There are alternative security deployment solutions such as software-based security, rather than the hardware-based security of our SentriX equipment.

In addition, we compete with multiple substitute forms of device programming including "home grown" solutions. Programming after device placement may be done with In Circuit Test ("ICT"), In System Programming ("ISP"), and End of Line Downloading ("EOL"). Some automotive products may also be programmed over the air ("OTA"). IoT devices may also be programmed with ICT, ISP, EOL or OTA. In addition, new security devices may be required to be programmed using device-specific programmers developed by the semiconductor manufacturer.

While we are not aware of any published industry market information covering the programming systems or security deployment market, according to our internal analysis of competitors' revenues, we believe we continue to be the largest competitor in the programming systems equipment market and have been gaining market share in recent years, especially with our new products.

Manufacturing, Raw Materials and Backlog

We strive to manufacture and provide the best solutions for advanced programming. We primarily assemble and test our products at our principal facilities in Redmond, Washington and Shanghai, China. Both of these locations are ISO 9001:2015 certified. We outsource our circuit board manufacturing and fabrication. As a resilient supply chain strategy, we manufacture various products in both of our production facilities. This strategy allows opportunity to mitigate some of the risks of having only one location, as well as enabling tariff and tax optimization strategies. We use a combination of standard components and fabricated parts manufactured to our specifications. Most components used are available from a number of different suppliers and subcontractors but certain items, such as some handler and programmer and security deployment subassemblies, custom integrated circuits, hybrid circuits and connectors, are purchased from single sources. We believe that additional sources can be developed for present single-source components without significant difficulties. We cannot be sure that single-source components will always continue to be readily available. If we cannot develop alternative sources for these components, or if we experience deterioration in relationships with these suppliers, there may be price increases, minimum order quantities, end of life purchase requirements, costs associated with integrating alternatively sourced parts, and delays or reductions in product introductions or shipments, which may materially adversely affect our operating results.

In accordance with industry practices, generally all orders are subject to cancellation prior to shipment without penalty, except for contracts calling for custom configuration. To date, such cancellations have not had a material effect on our sales volume. To meet customers' delivery requirements, we manufacture certain products based upon a combination of backlog and anticipated orders. Most orders are scheduled for delivery within 1 to 90 days after receipt of the order. Our backlog of pending orders was approximately (in millions) \$3.9, \$2.9 and \$1.9 as of December 31, 2020, 2019 and 2018, respectively. The size of backlog at any particular date is not necessarily a meaningful indicator of the trend of our business.

Research and Development

We believe that continued investment in research and development is critical to our future success. We continue to develop new technologies and products and enhance existing products. Future growth is, to a large extent, dependent upon the timely development and introduction of new products, as well as the development of technology and algorithms to support the latest programmable devices. Where possible, we may pursue partnerships and other strategic relationships to add new products, capabilities and services, particularly in security deployment. We are currently focusing our research and development efforts on strategic growth markets, including automotive electronics, IoT and security deployment. We are continuing to develop technology for security deployment to program new categories of semiconductors, including Secure Elements, TPMs, Authentication Chips, and Secure Microcontrollers. We plan to deliver new programming technology, automated handling systems and enhancements for security deployment in the manufacturing environment. We also continue to focus on increasing our capacity and responsiveness for new device support requests from customers and programmable integrated circuit manufacturers by revising and enhancing our internal processes and tools. Our research and development efforts have resulted in the release of significant new products and product enhancements over the past several years.

During 2020, 2019 and 2018, we made expenditures for research and development of (in millions) \$6.4, \$6.5 and \$7.4, respectively, representing 31%, 29.9% and 25.2% of net sales, respectively. Research and development costs are generally expensed as incurred.

Patents, Copyrights, Trademarks and Licenses

We rely on a combination of patents, copyrights, trade secrets and trademarks to protect our IP, as well as product development and marketing skill to establish and protect our market position. We continue to apply for and add new patents to our patent portfolio as we develop strategic new technologies.

We attempt to protect our rights in proprietary systems (architecture, implementations, software), including the SentriX Security Deployment System. We attempt to protect our software, including Lumen®X software, Flashcore software, TaskLink software, ConneX smart programming software and other software products, by retaining the title to and copyright of the software and documentation, by including appropriate contractual restrictions on use and disclosure in our licenses, and by requiring our employees to execute non-disclosure agreements. Our software products are not typically sold separately from sales of programming systems. However, when we sell software separately, we recognize revenue upon the transfer of control of the software, which is generally upon shipment, provided that only inconsequential performance obligations remain on our part and substantive acceptance conditions, if any, have been met.

Because of the rapidly changing technology in the semiconductor, electronic equipment and software industries, portions of our products might infringe upon existing patents or copyrights, and we may be required to obtain licenses or discontinue the use of the infringing technology. We believe that any exposure we may have regarding possible infringement claims is a reasonable

business risk similar to that assumed by other companies in the electronic equipment and software industries. However, any claim of infringement, with or without merit, could be costly and a diversion of management's attention, and an adverse determination could adversely affect our reputation, preclude us from offering certain products, and subject us to substantial liability. As of December 31, 2020, there were no pending actions regarding infringement claims.

Employees

As of December 31, 2020, we had a total of 96 employees, of which 46 were located outside the U.S. and 8 of which were part time. We also utilize independent contractors for specialty work, primarily in research and development, and utilize temporary workers to adjust capacity to fluctuating demand and for special projects. Many of our employees are highly skilled, trained and experienced in specialized areas and our continued success will depend in part upon our ability to attract and retain employees who can be in great demand within the industry. None of our employees are represented by a collective bargaining unit and we believe relations with our employees are favorable. In foreign countries we have employment agreements or, in China, the Shanghai Foreign Services Co., Ltd. ("FSCO") labor agreement.

When hiring and retaining talent, we create specialized knowledge that is difficult to replace short term. During COVID-19, we specifically avoided layoffs and other short-term measures to retain specialized skills and advance our research and development efforts while some other competitors were forced to reduce their research and development efforts.

Environmental Compliance

Data I/O is a leader in ESG in the programming industry. We are the only supplier with a published conflict mineral policy, and public company governance. To our knowledge, we are the only programming industry supplier with a diverse Board of Directors. Our facilities are subject to numerous laws and regulations concerning the discharge of materials or otherwise relating to the environment.

Data I/O is committed to all of the responsibilities associated with modern age ESG. The Company's key pillars for ESG support a framework for sustainable growth and include Leadership & Governance, Environment, Innovation, Human Capital, Social Capital, and Financial Excellence. Initiatives within these areas apply to the company's daily global operations as well as within its supply chains.

In addition to this commitment, the company has a track record of meeting its regulatory obligations, being a solid corporate citizen, delivering superior value to its customers and partners, and demonstrating enduring corporate stewardship while consistently returning capital to shareholders.

As the largest and only publicly traded company in its sector, Data I/O has led its industry in disclosing significant operational and financial information. The Company's Board currently includes Data I/O's CEO and four Independent Directors. It is diverse in gender, education, professional experience and differences in viewpoints and skills. Data I/O believes it was the first [and remains the only] in its industry to adopt a conflict minerals policy. Through its continuous improvement practices and our operations focus on assembly and test with no fabrication, the company consumes relatively little energy, has minimal or no emissions or pollutants to air and wastewater, and complies with workplace labor, safety and business practices on 3 continents.

Data I/O is also committed to giving back to our local communities through volunteer and internship programs. The Company provides employees time-off to volunteer and also coordinates group projects. In addition, the Company provides internships to local high school and college students through STEM and technical colleges.

Compliance with environmental laws has not had, nor is it expected to have, a material effect on our capital expenditures, financial position, results of operations or competitive position.

Executive Officers of the Registrant

Set forth below is certain information concerning the executive officers of Data I/O as of March 22, 2021:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Anthony Ambrose	59	President and Chief Executive Officer
Joel S. Hatlen	62	Vice President, Chief Operating and Financial Officer, Secretary and Treasurer
Rajeev Gulati	57	Chief Technology Officer, Vice President of Engineering
Michael Tidwell	52	Vice President Marketing and Business Development

Anthony Ambrose, age 59, joined Data I/O October 25, 2012 and is our President and Chief Executive Officer ("CEO"), and a member of the Board of Directors. Prior to Data I/O, Mr. Ambrose was Owner and Principal of Cedar Mill Partners, LLC, a strategy consulting firm since 2011. From 2007 to 2011, he was Vice President and General Manager at RadiSys Corporation, a leading provider of embedded wireless infrastructure solutions, where he led all product divisions and worldwide engineering. Until 2007, he was general manager and held several other progressively responsible positions at Intel Corporation, where he led development and marketing of standards-based telecommunications platforms, and grew the industry standard server business to over \$1B in revenues. He is Chair of the EvergreenHealth Foundation Board of Trustees. In 2019 he also became a board member of CipherLoc Corporation (OTCQB: CLOK). Mr. Ambrose has a Bachelor's of Science in Engineering from Princeton University, and completed the Stanford Graduate School of Business Director Symposium.

Joel S. Hatlen joined Data I/O in September 1991 and in July 2017 became our Chief Operating Officer in addition to serving as our Vice President, Chief Financial Officer, Secretary and Treasurer since January 1998. He was Chief Accounting Officer since February 1997 and served as Corporate Controller from December 1993 to December 1997. Previously, he was Tax Manager and Senior Tax Accountant. From September 1981 until joining Data I/O, Joel was employed by Ernst & Young LLP as a Certified Public Accountant, where his most recent position was Senior Manager. Joel is a Certified Public Accountant and holds a Masters in Taxation from Golden Gate University and a Bachelor's in Business Administration in Accounting from Pacific Lutheran University.

Rajeev Gulati joined Data I/O in July 2013 and is our Chief Technology Officer and Vice President of Engineering. Prior to Data I/O, Rajeev served as Director of Software Engineering for AMD responsible for tools, compiler strategy and execution from 2006 to 2013. He has an extensive background in software, systems and applying technology to develop new markets. Previously, he served as Director of Strategy and Planning at Freescale from 2004 to 2006; as Director of Embedded Products at Metrowerks (acquired by Motorola) from 2000 to 2004 and Director of Compilers, Libraries & Performance Tools from 1997 to 2000; and engineering and programmer positions at Apple Computer, IBM and Pacific-Sierra Research. Rajeev holds a Master of Science in Electrical & Computer Engineering from the University of Texas, Austin and a BE in Electrical Engineering from Delhi College of Engineering, New Delhi.

Michael Tidwell joined Data I/O in May 2019 and is our Vice President of Marketing and Business Development. Prior to Data I/O, he was Vice President of Marketing & Business Development at Tignis, an AI and machine learning startup. From 2012 to 2018 Michael was head of Marketing and Business Development at Sansa Security, a leading software security IP provider that was sold to ARM Holdings. Prior to Sansa, Michael was Vice President of Business and Market Development at BSQUARE Corporation. Michael has a Master of Science in Electrical Engineering from the University of Washington and a Bachelor of Electrical Engineering (Summa Cum Laude) from Georgia Institute of Technology.

Item 1A. Risk Factors

Cautionary Factors That May Affect Future Results

Our disclosure and analysis in this Annual Report contains some forward-looking statements. Forward-looking statements include our current expectations or forecasts of future events. The reader can identify these statements by the fact that they do not relate strictly to historical or current facts. In particular, these include statements relating to future action, the impact of the coronavirus, prospective products, expected market growth, new technologies and trends, industry partnerships, foreign operations, economic expectations, future performance or results of current and anticipated products, sales efforts, expenses, outcome of contingencies, impact of regulatory requirements, tariffs and financial results.

Any or all of the forward-looking statements in this Annual Report or in any other public statement made <u>may turn out to be wrong</u>. They can be affected by inaccurate assumptions we might make, or known or unknown risks and uncertainties can affect these forward-looking statements. Many factors -- for example, product competition and product development -- will be important in determining future results. Moreover, neither Data I/O nor anyone else assumes responsibility for the accuracy and completeness of these forward-looking statements. Actual future results may materially vary.

We undertake no obligation to publicly update any forward-looking statements after the date of this Annual Report, whether as a result of new information, future events or otherwise. The reader should not unduly rely on our forward-looking statements. The reader is advised, however, to consult any future disclosures we make on related subjects in our 10-Q, 8-K and 10-K reports to the SEC and press releases. Also, note that we provide the following cautionary discussion of risks, uncertainties and possible inaccurate assumptions relevant to our business. These are factors that we think could cause our actual results to differ materially from expected and historical results. Other factors besides those listed here could also adversely affect us. This discussion is permitted by the Private Securities Litigation Reform Act of 1995.

RISK FACTORS:

CORONAVIRUS

The coronavirus that causes the serious disease COVID-19 ("coronavirus"), has and may continue to adversely affect our business, including revenues, suppliers, employees and facilities.

As a global company with 93% of its 2020 sales in international markets, we have been and may continue to be, significantly impacted by the word wide coronavirus outbreak, which has affected all markets we serve. Thirty of our employees are based in Shanghai, China and we have a manufacturing facility there which manufactures some of our equipment and develops most of the adapters and algorithms for our equipment. Although our facilities in Shanghai, Redmond and Germany are currently operating, they could be closed for an extended period of time if the coronavirus spreads significantly. Additionally, we source other components from China and other countries that are used to manufacture our equipment in China and in our Redmond, Washington facility and these components may not be readily available. Many of our Redmond based employees and executives are working from home and we are limiting visitors to our Redmond facility. All of our facilities are subject to restrictions and closure by governmental entities. Travel restrictions have in some cases prevented and may continue to impact equipment installations, repairs and selling at customer sites. As the coronavirus continues as a pandemic, it has and may continue to impact our revenues, our ability to obtain key components and to manufacture our products, as well as sell, install and support our products around the world.

The coronavirus has and continues to impact key tradeshows and travel plans for our employees. Because of the coronavirus we are not able to visit many of our customers and prospects. Many tradeshows, marketing activities and conferences have been canceled, postponed or made virtual.

TARIFFS AND TRADE ISSUES

Changes in tariffs and trade issues may adversely affect our business, including revenues and/or gross margins.

We produce products in the United States and China. Currently, certain of our products are subject to tariffs imposed by one country on goods manufactured in the other country. This has materially impacted our gross margins negatively. There is uncertainty regarding the tariffs expected to be imposed, and any increase in tariff rates and subjecting additional items to tariffs, could impact our costs, revenues and the competitiveness of our products due to our manufacturing locations. Trade and tariff issues are creating business uncertainty and may spread to and impact other jurisdictions.

Additionally, trade tensions between the United States and China are impacting our ability to seamlessly design, build, market and sell our products. Some customers have moved production away from China, further from our facilities and engineers. We endeavor to have multi-sourced manufacturing, but this is not currently practical for all products in all locations.

Brexit has not had any significant impact on our business, however as further effects become apparent its impact on us could change.

NEW PRODUCTS OR SERVICES

We are pursuing new product or service initiatives, and business models that may develop more slowly and/or to a lesser extent than expected

In order to lead in new and potentially lucrative market opportunities, for example in security deployment of programmable devices, circuit boards and electronic systems, we are making significant investments in people, technology and business development while the market is developing and uncertain. Due to the length of time to market from design to production in security provisioning, if these markets develop more slowly than planned, or if our security deployment solutions are not widely accepted, then we may not achieve our expected return on investment in new technologies and this may significantly affect the results of our existing business.

In the security deployment area, we have introduced a new pay per use business model and service fees that may not be accepted by our customers who are accustomed to paying for capital equipment upfront, rather than paying per use charges.

Failure to adapt to technology trends in our industry may impact our competitiveness and financial results.

Product and service technology in our industry evolves rapidly, making timely product innovation essential to success in the marketplace. Introducing products and services with improved technologies or features may render our existing products obsolete and unmarketable. Technological advances and trends that may negatively impact our business include:

- new device package types, densities, chip interfaces and technologies requiring hardware and software changes in order to be programmed by our products, particularly certain segments of the high-density flash memory markets where after placement programming is recommended by certain semiconductor manufacturers
- reduction in semiconductor process geometries for certain 3 Dimensional (3D), Multi Level Cell (MLC) and Triple Level Cell (TLC) NAND and eMMC FLASH memories impact the product data retention through Surface Mount Technology (SMT) reflow or X-ray inspection. Improper SMT process control can negatively impact the end customer's ability to successfully program devices. This can cause them to change their programing methods away from pre-programming to post placement programming techniques, including ISP, ICT. Data I/O is working with several semiconductor manufacturers to develop best practices to minimize the impact of reflow and potential concerns about X-ray induced data loss.
- changes in Flash technology speeds will eventually require us to change the architecture of our programming engines
- · electronics equipment manufacturing practices, such as widespread use of in-circuit programming or downloading
- adoption of proprietary security and programming protocols and additional security capabilities and requirements
- customer software platform preferences different from those on which our products operate
- customer adoption of newer unsupported semiconductor device technologies such as UFS memory or device interface methods, particularly if these technologies are adopted by automotive electronics, IoT or wireless customers
- more rigid industry standards, which would decrease the value-added element of our products and support services

If we cannot develop products or services in a timely manner in response to industry changes, or if our products or services do not perform well, our business and financial condition may be adversely affected. Also, our new products or services may contain defects or errors that give rise to product liability claims against us or cause our products to fail to gain market acceptance. Our future success depends on our ability to successfully compete with other technology firms in attracting and retaining key technical personnel.

<u>Failure to adapt to increasing automotive electronics customer requirements may impact our competitiveness and result in a decline in sales or increased costs.</u>

Concentration in Automotive Electronics and our orders related to automotive electronics customers has been dominant in recent years at 53% in 2020, 60% in 2019 and 60% in 2018. As we have been concentrated on automotive electronics customers, any decrease in demand from these customers (for example, many had plant shut downs during the second quarter of 2020) may materially impact our results, as it will take some time to transition our product line to other markets. Quality standards and business requirements by our automotive electronics customers, driven in turn by their automotive manufacturer customers, may demand processes, and certifications at a higher level than we currently are structured to provide. For example, although we currently meet the ISO 9001:2015 standard, new quality standards may be demanded by our customers with even more rigorous requirements. In addition, contractual provisions may expose us to greater potential liability and costs and we may be required to provide higher service levels than we currently provide. If we cannot adapt to these industry requirements or manage these contractual provisions, our business may be adversely affected.

Delays in development, introduction and shipment of new products or services may result in a decline in sales or increased costs.

We develop new engineering and automated programming systems and services. Significant technological, supplier, manufacturing or other problems may delay the development, introduction or production of these products or services.

For example, we may encounter these problems:

- technical problems in the development of a new programming and/or security deployment systems or the robotics for new automated handing systems
- inability to hire qualified personnel or turnover in existing personnel or inability to engage or retain key technology partners
- delays or failures to perform by us or third parties, including some smaller early stage or recently acquired companies, involved

in our development projects

- dependence on large semiconductor companies for cooperation and support to securely provision their devices. These companies must enable us with specific technical information, and support Data I/O as a qualified solution to their customers and channel partners.
- development of new products or services that are not accepted by the market

These problems may result in a delay or decline in sales or increased costs.

We may pursue business acquisitions that could impair our financial position and profitability.

We may pursue acquisitions of complementary technologies, product lines or businesses. Future acquisitions may include risks, such as:

- burdening management and our operating teams during the integration of the acquisition
- diverting management's attention from other business concerns
- failing to successfully integrate or monetize the acquired products or technologies
- lack of acceptance of the acquired products by our sales channels or customers
- entering markets where we have no or limited prior experience
- potential loss of key employees of the acquired company
- additional burden of support for an acquired programmer architecture

Future acquisitions may also impact our financial position. For example, we may use significant cash or incur debt, which would weaken our balance sheet, or issue additional shares, potentially diluting existing shareholders. We may also capitalize goodwill and intangible assets acquired, the amortization or impairment of which would reduce our profitability. We cannot guarantee that future acquisitions will improve our business or operating results.

If we are unable to protect our IP, we may not be able to compete effectively or operate profitably.

We rely on patents, copyrights, trade secrets and trademarks to protect our IP, as well as product development and marketing skill to establish and protect our market position. In particular, patents are a key part of our security deployment strategy, and if we are not able to successfully enforce these patents, we might lose our competitive advantage in the security deployment market. We attempt to protect our rights in proprietary software products, including our user interface, product firmware, software module options and other software products by retaining the title to and copyright of the software and documentation, by including appropriate contractual restrictions on use and disclosure in our licenses, and by requiring our employees to execute non-disclosure agreements.

Because of the rapidly changing technology in the semiconductor, electronic equipment and software industries, portions of our products might possibly infringe upon existing patents or copyrights, and we might be required to obtain licenses or discontinue the use of the infringing technology. We believe that any exposure we may have regarding possible infringement claims is a reasonable business risk similar to that assumed by other companies in the electronic equipment and software industries. However, any claim of infringement, with or without merit, could be costly and a diversion of management's attention, and an adverse determination could adversely affect our reputation, preclude us from offering certain products, and subject us to substantial liability.

We might face increased competition and might not be able to compete successfully with current and future competitors.

Technological advances have reduced the barriers of entry into the programming systems market. We expect competition to increase from both established and emerging companies. If we fail to compete successfully against current and future sources of competition, our profitability and financial performance will be adversely impacted.

THIRD PARTY RELATIONSHIPS

If we do not develop, enhance and retain our relationships with security partners, our business may be adversely affected and we may not be able to timely develop new and cost effective managed and secure programming solutions.

We may be required to complement our skills and expertise with partners' expertise. Some of these partners are operating with more limited capital and/or management expertise than established firms or recently acquired firms that may have different priorities. Other partners are very large companies where prioritizing work with us may be difficult in light of competing priorities. For some of our then earlier stage partners, we have obtained unique product features and capabilities in exchange for NRE payments, pre-paid royalties, marketing incentives and sales cooperation. As these unique features and capabilities are no longer available, we face more competition. If our partners are unable to develop and deliver solutions that we need to integrate into our solutions, our products might be delayed, we might have to locate alternate partners and suppliers or develop the technology ourselves, and we have been, and could be, in future arrangements still responsible for paying the costs of any related pre-paid royalties or NRE payments, and have, and might result in, write-offs of any excess equipment or inventory. In 2020, we significantly reduced our dependence on third parties for our SentriX platform.

If we do not develop and enhance our relationships with semiconductor manufacturers, our business may be adversely affected.

We work closely with most semiconductor manufacturers to ensure that our data programming and security deployment systems comply with their requirements. In addition, many semiconductor manufacturers recommend our managed and secure programming systems for use by users of their programmable devices. These working relationships enable us to keep our programming systems product lines up to date and provide end-users with broad and current programmable device support. As technology changes occur that could limit the effectiveness of pre-placement programming, particularly for very small high-density NAND, e-MMC and UFS devices, certain semiconductor manufacturers may not recommend or may not continue recommending our programming systems for these devices. Our business may be adversely affected if our relationships with semiconductor manufacturers deteriorate or if semiconductor manufacturers are not willing to closely work with us on security deployment. Consolidation within the semiconductor industry may also impact us. As we develop more security deployment solutions, we will need to partner more closely with semiconductor manufacturers.

Our reliance on a small number of suppliers may result in a shortage of key components, which may adversely affect our business, and our suppliers may experience financial difficulties which could impact their ability to service our needs.

Certain parts or software used in our products are currently available from either a single supplier or from a limited number of suppliers. Our small relative level of business means we frequently lack influence and significant purchasing power. If we cannot develop alternative sources of these components, if sales of parts or software are discontinued by the supplier, if we experience deterioration in our relationship with these suppliers, or if these suppliers require financing which is not available, there may be delays or reductions in product introductions or shipments, which may materially adversely affect our operating results.

Because we rely on a small number of suppliers for certain parts, we are subject to possible price increases by these suppliers. Also, we may be unable to accurately forecast our production schedule. If we underestimate our production schedule, suppliers may be unable to meet our demand for components. This delay in the supply of key components may have a materially adverse effect on our business. For suppliers who discontinue parts, we may be required to make lifetime purchases covering future requirements. Over estimation of demand or excessive minimum order quantities will lead to excess inventories that may become obsolete.

Some of our sockets, parts, subassemblies and boards are currently manufactured to our specifications by third-party foreign contract manufacturers and we are sourcing certain parts or options from foreign manufacturers, particularly in China. For example, due to the coronavirus or other viruses impacting workers, suppliers or travel, we may not be able to obtain a sufficient quantity of these products if and when needed or the quality of these parts or options may not meet our standards, which may result in lost sales.

If we are unable to attract and retain qualified third-party distributors and representatives, our business may be adversely affected.

We have an internal sales force and also utilize third-party distributors and representatives. Therefore, the financial stability of these distributors and representatives is important. Their ability to operate, timely pay us, and to acquire any necessary financing may be affected by the current economic climate. Highly skilled professional engineers use most of our products. To be effective, third-party distributors and representatives must possess significant technical, marketing, customer relationships and sales resources and must devote their resources to sales efforts, customer education, training and support. These required qualities

limit the number of potential third-party distributors and representatives. Our business will suffer if we cannot attract and retain a sufficient number of qualified third-party distributors and representatives to market our products.

MARKET CONDITIONS

A decline in economic and market conditions may result in delayed or decreased capital spending and delayed or defaulted payments from our customers.

The coronavirus appears likely to affect economic and market conditions as it continues to spread. Our business is highly impacted by capital spending plans and other economic cycles that affect the users and manufacturers of integrated circuits. The industries are highly cyclical and are characterized by rapid technological change, short product life cycles and fluctuations in manufacturing capacity and pricing and gross margin pressures. As we experienced in this and recent prior years, our operations may in the future reflect substantial fluctuations from period-to-period as a consequence of these industry patterns, general economic conditions affecting the timing of orders from major customers, and other factors affecting capital spending. In a difficult economic climate, it may take us longer to receive payments from our customers and some of our customers' business may fail, resulting in non-payment. Our market growth forecasts and related business decisions may be wrong. These factors could have a material adverse effect on our business and financial condition.

Our international operations may expose us to additional risks that may adversely affect our business.

International sales represented approximately 93%, 92% and 88% of net sales in 2020, 2019 and 2018, respectively. We expect that international sales will continue to be a significant portion of our net revenue. International sales may fluctuate due to various factors, including:

- the impact of the coronavirus or other viruses
- fluctuations in foreign currency exchange rates because 93% of our sales are to international markets, volatile exchange rates may also impact our competitiveness and margins
- economic uncertainty related to the European sovereign debt situation
- migration of manufacturing to low cost geographies
- unexpected changes in regulatory requirements, including Brexit
- tariffs and taxes
- Bi-lateral and Multi-lateral trade agreements
- difficulties in staffing and managing foreign operations
- longer average payment cycles and difficulty in collecting accounts receivable
- compliance with applicable export licensing requirements and the Foreign Corrupt Practices Act
- product safety and other certification requirements
- difficulties in integrating foreign and outsourced operations
- civil unrest, political and economic instability

Because we have customers located throughout the world, we have significant foreign receivables. We may experience difficulties in collecting these amounts as a result of payment practices of certain foreign customers, economic uncertainty and regulations in foreign countries, the availability and reliability of foreign credit information, and potential difficulties in enforcing collection terms.

The European Union and European Free Trade Association ("EU") has established certain electronic emission and product safety requirements ("CE"). As applicable, our products currently meet these requirements; however, failure to obtain either a CE certification or a waiver for any product may prevent us from marketing that product in Europe. The EU also has directives concerning the Reduction of Hazardous Substances ("RoHS") and we believe we are classified within the EU RoHS Directive category list as Industrial Monitoring and Control Equipment (category 9). We believe all current products meet the RoHS directives. Failure to meet applicable directives or qualifying exemptions may prevent us from marketing certain products in Europe or other territories with similar requirements.

We have subsidiaries in Germany and China and large balances of cash are in our foreign subsidiaries. Our business and financial condition is sensitive to currency exchange rates and any restrictions imposed on their currencies including restrictions on repatriations of cash. A repatriation of cash has, and could in the future, result in tax costs and corresponding deferred tax assets with related tax valuation allowances. Currency exchange fluctuations in these countries may adversely affect our investment in our subsidiaries.

OPERATIONS

Quarterly fluctuations in our operating results may adversely affect our stock price.

Our operating results tend to vary from quarter to quarter. Our revenue in each quarter substantially depends upon orders received within that quarter. Conversely, our expenditures are based on investment plans and estimates of future revenues. We may, therefore, be unable to quickly reduce our spending if our revenues decline in a given quarter. As a result, operating results for that quarter will suffer. Our results of operations for any one quarter are not necessarily indicative of results for any future periods.

Other factors, which may cause our quarterly operating results to fluctuate, include:

- increased competition
- timing of new product announcements and timing of development expenditures
- product or service releases and pricing changes by us or our competitors
- market acceptance or delays in the introduction of new products or services
- production constraints
- quality issues
- labor or material constraints
- timing of significant orders
- timing of installation or customer acceptance requirements
- sales channel mix of direct vs. indirect distribution
- civil unrest, war or terrorism
- health issues such as the outbreak of the coronavirus or other viruses impacting workers, suppliers, customers, travel, or our facilities
- customers' budgets
- changes in accounting rules, tax or other legislation
- adverse movements in exchange rates, interest rates or tax rates
- cyclical and seasonal nature of demand for our customers' products
- general economic conditions in the countries where we sell products
- expenses and delays obtaining authorizations in setting up new operations or locations
- facilities relocations

Due to any of the foregoing factors, it is possible that in some future quarters, our operating results will be below expectations of analysts and investors.

We have a history of operating losses and may be unable to generate enough revenue to achieve and maintain profitability.

We have incurred operating losses in four of the last ten years. We operate in a cyclical industry. We will continue to examine our level of operating expense based upon our projected revenues. Any planned increases in operating expenses may result in losses in future periods if projected revenues are not achieved or the investment level required is too large. As a result, we may need to generate greater revenues than we have recently in order to maintain profitability. However, we cannot provide assurance that our revenues will continue to increase and our business strategies may not be successful, resulting in future losses.

The loss of key employees may adversely affect our operations.

We have employees located in the U.S., Germany and China. We also utilize independent contractors for specialty work, primarily in research and development, and utilize temporary workers to adjust capacity to fluctuating demand. Many of our employees are highly skilled and our continued success will depend in part upon our ability to attract and retain employees who can be in great demand within the industry. None of our employees are represented by a collective bargaining unit and we believe relations with our employees are favorable, though no assurance can be made that this will be the case in the future. In China, our workers have benefits and similar arrangements provided under a "FSCO" labor agreement and we could be adversely affected if we were unable to continue that arrangement.

We may need to raise additional capital and our future access to capital is uncertain.

Our past revenues have sometimes been, and our future revenues may again be, insufficient to support the expense of our operations and any expansion of our business. We may therefore need additional equity or debt capital to finance our operations. If we are unable to generate sufficient cash flows from operations or to obtain funds through additional debt, lease or equity financing, we may have to reduce some or all of our development and sales and marketing efforts and limit the expansion of our business.

We believe that we have sufficient cash or working capital available under our operating plan to fund our operations and capital requirements through at least the next one-year period. In the event we require additional cash for U.S. operations or other needs, we may choose to repatriate some, or all, of the \$6.8 million held in our foreign subsidiaries. Although we have no current repatriation plans, there may be tax, legal and other impediments to any repatriation actions. Our working capital may be used to fund possible losses, business growth, project initiatives, share repurchases and business development initiatives including acquisitions, which could reduce our liquidity and result in a requirement for additional cash before that time. Any substantial inability to achieve our current business plan could have a material adverse impact on our financial position, liquidity, or results of operations and may require us to reduce expenditures and/or seek additional financing.

Therefore, we may seek additional funding through public or private debt or equity financing or from other sources. We have no commitments for additional financing, and given a potential future unfavorable economic climate and our financial results, we may experience difficulty in obtaining funding on favorable terms, if at all. Any financing we obtain may contain covenants that restrict our freedom to operate our business or may require us to issue securities that have rights, preferences or privileges senior to our Common Stock and may dilute your ownership interest.

Cyber security breaches or terrorism could result in liabilities or costs as well as damage to or loss of our data or customer access to our website and information systems. The collection, storage, transmission, use and disclosure of user data and personal information, if accessed improperly, could give rise to liabilities or additional costs as a result of laws, governmental regulations and evolving views of personal privacy rights.

Cyber security breaches or terrorism could result in the exposure or theft of private or confidential information as well as interrupt our business, including denying customer access to our website and information systems. We transmit, and in some cases store, end-user data, including personal information. In jurisdictions around the world, personal information is becoming increasingly subject to legislation and regulations intended to protect consumers' privacy and security. The interpretation of privacy and data protection laws and regulations regarding the collection, storage, transmission, use and disclosure of such information in some jurisdictions is unclear and evolving. These laws may be interpreted and applied in conflicting ways from country to country and in a manner that is not consistent with our current data protection practices. Complying with these varying international requirements could cause us to incur additional costs and change our business practices. Because our services are accessible in many foreign jurisdictions, some of these jurisdictions may claim that we are required to comply with their laws, even where we have no local entity, employees or infrastructure. We could be forced to incur significant expenses if we were required to modify our products, our services or our existing security and privacy procedures in order to comply with new or expanded regulations.

Our stock price may be volatile and, as a result, our shareholders may lose some or all of their investment.

The stock prices of technology companies tend to fluctuate significantly. We believe factors such as announcements of new products or services by us or our competitors and quarterly variations in financial results and outlook may cause the market price of our Common Stock to fluctuate substantially. In addition, overall volatility in the stock market, particularly in the technology company sector, is often unrelated to the operating performance of companies. If these market fluctuations continue in the future, they may adversely affect the price of our Common Stock. Additionally, securities of certain companies have recently experienced significant and extreme volatility in stock price due short sellers of shares of common stock, known as a "short squeeze." These short squeezes have caused extreme volatility in both the stock prices of those companies and in the market, and have led to the

price per share of those companies to trade at a significantly inflated rate that is disconnected from the underlying value of the company. Many investors who have purchased shares in those companies at an inflated rate face the risk of losing a significant portion of their original investment, as in many cases the price per share has declined steadily as interest in those stocks have abated. While we have no reason to believe our shares would be the target of a short squeeze, there can be no assurance that we won't be in the future, and you may lose a significant portion or all of your investment if you purchase our shares at a rate that is significantly disconnected from our underlying value.

REGULATORY REQUIREMENTS

Failure to comply with increasing regulatory requirements may adversely affect our stock price and business.

As a public company, we are subject to numerous governmental and stock exchange requirements, with which we believe we are in compliance. Our failure to meet regulatory requirements and exchange listing standards may result in actions such as: the delisting of our stock, impacting our stock's liquidity; SEC enforcement actions; and securities claims and litigation.

The Sarbanes-Oxley Act of 2002 and the Securities and Exchange Commission (SEC) have requirements that we may fail to meet or we may fall out of compliance with, such as the internal controls auditor attestation required under Section 404 of the Sarbanes-Oxley Act of 2002, with which we are not currently required to comply as we are a smaller reporting company. We assume that we will continue to have the status of a smaller reporting company based on the aggregate market value of the voting and non-voting shares held as of June 30, 2020. If we fail to achieve and maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal controls over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act of 2002. Moreover, effective internal controls, particularly those related to revenue recognition, are necessary for us to produce reliable financial reports and are important to help prevent financial fraud. If we cannot provide reliable financial reports or prevent fraud, our business and operating results could be harmed, investors could lose confidence in our reported financial information, and the trading price of our stock could drop significantly.

While we have policies and procedures in place designed to prevent corruption and bribery, because our business is significantly international, violations of the Foreign Corrupt Practices Act (FCPA) could have a significant adverse effect on our business due to the disruption and distraction of an investigation, financial penalties and criminal penalties.

Government regulations regarding the use of "conflict" minerals could adversely affect our prospects and results of operations.

Regulatory requirements regarding disclosure of our use of "conflict" minerals mined from the Democratic Republic of Congo and adjoining countries could affect the sourcing and availability of minerals used in the manufacture of certain products. Although we do not buy raw materials, manufacture, or produce any electronic equipment using conflict minerals directly, some components provided by our suppliers and contained in our products contain conflict minerals. Our goal is for our products to be conflict free. As a result, there may only be a limited pool of suppliers who provide conflict free metals, and we cannot assure you that we will be able to obtain products in sufficient quantities or at competitive prices. Single source suppliers may not respond or respond negatively regarding conflict mineral sourcing and we may be unable to find alternative sources to replace them. Also, because our supply chain is complex, we may face reputational challenges with our customers and other stakeholders if we are unable to sufficiently verify the origins for all metals used in the products that we sell. Further, if we are unable to comply with the new laws or regulations or if our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us. We may need to incur additional costs and invest additional resources, including management's time, in order to comply with the new regulations and anticipated additional reporting and disclosure obligations.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

During the third quarter of 2017, we amended our lease agreement for the Redmond, Washington headquarters facility, extending the lease to July 31, 2022. Previously on June 8, 2015 the lease had been amended to relocate our headquarters to a nearby

building and lower the square footage to approximately 20,460. The lease base annual rental payments during 2020 and 2019 were approximately \$361,000 and \$351,000, respectively.

In addition to the Redmond facility, approximately 24,000 square feet is leased at two foreign locations, including our sales, service, operations and engineering office located in Shanghai, China, and our German sales, service and engineering office located near Munich, Germany.

We signed a lease agreement effective November 1, 2015 that extends through October 31, 2021 for a facility located in Shanghai, China. This lease is for approximately 19,400 square feet. The lease base annual rental payments during 2020 and 2019 were approximately \$301,000 and \$305,000, respectively.

During the fourth quarter of 2016, we signed a lease agreement for a new facility located near Munich, Germany which was effective March 1, 2017 and extends through February 28, 2022 with a five year further extension to 2027. This lease is for approximately 4,895 square feet. The lease base annual rental payments during 2020 and 2019 were approximately \$62,000 and \$57,000, respectively.

Item 3. Legal Proceedings

From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business. As of December 31, 2020, we were not a party to any legal proceedings or aware of any indemnification agreement claims, the adverse outcome of which in management's opinion, individually or in the aggregate, would have a material adverse effect on our results of operations or financial position.

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

Our Common Stock is listed on the NASDAQ Capital Market (NASDAQ symbol is DAIO). The closing price was \$4.12 on December 31, 2020.

The approximate number of shareholders of record as of March 22, 2021 was 431.

Except for special cash dividend of \$4.15 per share paid on March 8, 1989, we have not paid cash dividends on our Common Stock and do not anticipate paying regular cash dividends in the foreseeable future.

No sales of unregistered securities were made by us during the periods ended December 31, 2020, 2019 or 2018.

See Item 12 for the Equity Compensation Plan Information.

Item 6. Selected Financial Data

Not applicable.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. This Act provides a "safe harbor" for forward-looking statements to encourage companies to provide prospective information about themselves as long as they identify these statements as forward-looking and provide meaningful cautionary statements identifying important factors that could cause actual results to differ from the projected results. All statements other than statements of historical fact made in this Annual Report on Form 10-K are forward-looking. In particular, statements herein regarding economic outlook, impact of novel coronavirus or COVID-19; industry prospects and trends; expected business recovery; industry partnerships; future results of operations or financial position; future spending; breakeven revenue point; expected market decline bottom or growth; market acceptance of our newly introduced or upgraded products or services;

the sufficiency of our cash to fund future operations and capital requirements; development, introduction and shipment of new products or services; changing foreign operations; trade issues and tariffs; expected inventory levels; expectations for unsupported platform or product versions and related inventory and other charges; and any other guidance on future periods are forward-looking statements. Forward-looking statements reflect management's current expectations and are inherently uncertain. Although we believe that the expectations reflected in these forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, achievements, or other future events. Moreover, neither Data I/O nor anyone else assumes responsibility for the accuracy and completeness of these forward-looking statements. We are under no duty to update any of these forward-looking statements after the date of this Annual Report. The Reader should not place undue reliance on these forward-looking statements. The following discussions and the section entitled "Risk Factors – Cautionary Factors That May Affect Future Results" describes some, but not all, of the factors that could cause these differences.

OVERVIEW

We sustained our second loss in 6 years due to a pandemic related downturn in orders, combined with continued significant investments in our security deployment business. Our strong cash position and balance sheet combined with our long-term view of the market gives us the financial flexibility to make these security business decisions. At Data I/O, we are investing for the long term to retain and extend our leadership position. On the product side, we continue to invest with a long-term focus towards expanding our markets and creating unique value for our customers. This is true for both our traditional core business as well as the emerging security deployment business.

The automotive electronics market is cyclical and has been impacted by the pandemic, and, we experienced the downturn in capital and consumable spending related to it and the electronics industry. We continued our focus on automotive electronics and managing the core programming business to conserve cash and working capital during 2020 while positioning us for growth and profitability. Customer and industry sources have communicated expectations for automotive electronics to have a decade of growth at a 10 to 15% compound annual growth rate, confirming our focus on this market. In addition, the IoT market expected growth is the driver of future revenue and earnings growth as we invest resources in the security deployment market. During 2020, we launched a new generation of SentriX tools and capability. We made the strategic decision to control key pieces of the technology and enhance the ability to both simplify the security deployment process, own the end-to-end intellectual property and scale our business. As a result of this decision, we impaired the earlier generation of security deployment tools, inventory, and assets. This enables us to move forward and support customers with enhanced new technology unburdened by the restrictions, costs, and complexity of the previous tools. Our challenge continues to be operating in a cyclical and rapidly evolving industry environment. Our efforts are to balance industry changes, industry partnerships, new technologies, business geography shifts, exchange rate volatility, trade issues and tariffs, coronavirus impacts, increasing costs and strategic investments in our business with the level of demand and mix of business we expect. We continue to manage our costs carefully and execute strategies for cost reduction.

We are focusing our research and development efforts in our strategic growth markets, namely automotive electronics and IoT new programming technologies, secure supply chain solutions, automated programming systems and their enhancements for the manufacturing environment and software. We are developing technology and products to securely provision new categories of semiconductors, including Secure Elements, Authentication Chips, and Secure Microcontrollers. We plan to deliver new programming technology and automated handling systems for managed and secure programming in the manufacturing environment. We continue to focus on extending the capabilities and support for our product lines and supporting the latest semiconductor devices, including various configurations of NAND Flash, e-MMC, UFS, TPM and microcontrollers on our newer products.

Our customer focus has been on global and strategic high-volume manufacturers in key market segments like automotive electronics, IoT, industrial controls and consumer electronics as well as programming centers.

Although the long-term prospects for our strategic growth markets should be good, these markets and our business have been, and are likely to continue to be, adversely impacted, at least temporarily, by the global pandemic of coronavirus. See also the detailed discussion of the impacts of the coronavirus on our business and markets in Item 1A, Risk Factors. Annual and quarterly projections on spending, growth, mix, and profitability are likely to be revised substantially with changing pandemic impacts and as new information is obtained.

CRITICAL ACCOUNTING POLICY JUDGMENTS AND ESTIMATES

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires that we make estimates and judgments, which affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including

those related to revenue recognition, sales returns, bad debts, inventories, intangible assets, income taxes, warranty obligations, restructuring charges, contingencies such as litigation and contract terms that have multiple elements and other complexities typical in the capital equipment industry. We base our estimates on historical experience and other assumptions that we believe are reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect the more significant judgments and estimates used in the preparation of our financial statements:

Revenue Recognition: Topic 606 provides a single, principles-based five-step model to be applied to all contracts with customers. It generally provides for the recognition of revenue in an amount that reflects the consideration to which the Company expects to be entitled, net of allowances for estimated returns, discounts or sales incentives, as well as taxes collected from customers when control over the promised goods or services are transferred to the customer.

We expense contract acquisition costs, primarily sales commissions, for contracts with terms of one year or less and will capitalize and amortize incremental costs with terms that exceed one year. During 2020 and 2019, the impact of capitalization of incremental costs for obtaining contracts was immaterial. We exclude sales, use, value added, some excise taxes and other similar taxes from the measurement of the transaction price.

We recognize revenue upon transfer of control of the promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. We have determined that our programming equipment has reached a point of maturity and stability such that product acceptance can be assured by testing at the factory prior to shipment and that the installation meets the criteria to be a separate performance obligation. These systems are standard products with published product specifications and are configurable with standard options. The evidence that these systems could be deemed as accepted was based upon having standardized factory production of the units, results from batteries of tests of product performance to our published specifications, quality inspections and installation standardization, as well as past product operation validation with the customer and the history provided by our installed base of products upon which the current versions were based.

The revenue related to products requiring installation that is perfunctory is recognized upon transfer of control of the product to customers, which generally is at the time of shipment. Installation that is considered perfunctory includes any installation that is expected to be performed by other parties, such as distributors, other vendors, or the customers themselves. This considers the complexity, skill and training needed as well as customer expectations regarding installation.

We enter into arrangements with multiple performance obligations that arise during the sale of a system that includes an installation component, a service and support component and a software maintenance component. We allocate the transaction price of each element based on relative selling prices. Relative selling price is based on the selling price of the standalone system. For the installation and service and support performance obligations, we use the value of the discount given to distributors who perform these components. For software maintenance performance obligations, we use what we charge for annual software maintenance renewals after the initial year the system is sold. Revenue is recognized on the system sale based on shipping terms, installation revenue is recognized after the installation is performed, and hardware service and support and software maintenance revenue is recognized ratably over the term of the agreement, typically one year. Deferred revenue includes service, support and maintenance contracts and represents the undelivered performance obligation of agreements that are typically for one year.

When we sell software separately, we recognize revenue upon the transfer of control of the software, which is generally upon shipment, provided that only inconsequential performance obligations remain on our part and substantive acceptance conditions, if any, have been met.

We recognize revenue when there is an approved contract that both parties are committed to perform, both parties rights have been identified, the contract has substance, collection of substantially all the consideration is probable, the transaction price has been determined and allocated over the performance obligations, the performance obligations including substantive acceptance conditions, if any, in the contract have been met, the obligation is not contingent on resale of the product, the buyer's obligation would not be changed in the event of theft, physical destruction or damage to the product, the buyer acquiring the product for resale has economic substance apart from us and we do not have significant obligations for future performance to directly bring about the resale of the product by the buyer. We establish a reserve for sales returns based on historical trends in product returns and estimates for new items. Payment terms are generally 30 days from shipment.

We transfer certain products out of service from their internal use and make them available for sale. The products transferred are typically our standard products in one of the following areas: service loaners, rental or test units; engineering test units; or sales demonstration equipment. Once transferred, the equipment is sold by our regular sales channels as used equipment inventory.

These product units often involve refurbishing and an equipment warranty, and are conducted as sales in our normal and ordinary course of business. The transfer amount is the product unit's net book value and the sale transaction is accounted for as revenue and cost of goods sold.

Allowance for Doubtful Accounts: We base the allowance for doubtful accounts receivable on our assessment of the collectability of specific customer accounts and the aging of accounts receivable. If there is deterioration of a major customer's credit worthiness or actual defaults are higher than historical experience, our estimates of the recoverability of amounts due to us could be adversely affected.

Inventory: Inventories are stated at the lower of cost or net realizable value. Adjustments are made to standard cost, which approximates actual cost on a first-in, first-out basis. We estimate reductions to inventory for obsolete, slow-moving, excess and non-salable inventory by reviewing current transactions and forecasted product demand. We evaluate our inventories on an item by item basis and record inventory adjustments accordingly. If there is a significant decrease in demand for our products, uncertainty during product line transitions, or a higher risk of inventory obsolescence because of rapidly changing technology and customer requirements, we may be required to increase our inventory adjustments and our gross margin could be adversely affected.

Warranty Accruals: We accrue for warranty costs based on the expected material and labor costs to fulfill our warranty obligations. If we experience an increase in warranty claims, which are higher than our historical experience, our gross margin could be adversely affected.

Tax Valuation Allowances: Given the uncertainty created by our loss history, as well as the current and ongoing cyclical and COVID-19 related uncertain economic outlook for our industry and capital and geographic spending as well as income and current net deferred tax assets by entity and country, we expect to continue to limit the recognition of net deferred tax assets and accounting for uncertain tax positions and maintain the tax valuation allowances. At the current time, we expect, therefore, that reversals of the tax valuation allowance will take place as we are able to take advantage of the underlying tax loss or other attributes in carry forward or their use by future income or circumstances allow us to realize these attributes. The transfer pricing and expense or cost sharing arrangements are complex areas where judgments, such as the determination of arms-length arrangements, can be subject to challenges by different tax jurisdictions.

Share-based Compensation: We account for share-based awards made to our employees and directors, including employee stock option awards and restricted stock unit awards, using the estimated grant date fair value method of accounting. For options, we estimate the fair value using the Black-Scholes valuation model and an estimated forfeiture rate, which requires the input of highly subjective assumptions, including the option's expected life and the price volatility of the underlying stock. The expected stock price volatility assumption was determined using the historical volatility of our common stock. Changes in the subjective assumptions required in the valuation model may significantly affect the estimated value of the awards, the related stock-based compensation expense and, consequently, our results of operations. Restricted stock unit awards are valued based on the average of the high and low price on the date of the grant and an estimated forfeiture rate. For both options and restricted awards, expense is recognized as compensation expense on the straight-line basis. Employee Stock Purchase Plan ("ESPP") shares were issued under provisions that do not require us to record any equity compensation expense.

RESULTS OF OPERATIONS:

NET SALES

Net sales by product line	2020	Change	2019
(in thousands)			
Automated programming systems	\$16,509	(0.8%)	\$16,642
Non-automated programming systems	3,819	(22.5%)	4,926
Total programming systems	\$20,328	(5.7%)	\$21,568
Net sales by location	2020	Change	2019
(in thousands)			
United States	\$1,516	(12.6%)	\$1,735
% of total	7.5%		8.0%
International	\$18,812	(5.1%)	\$19,833
% of total	92.5%		92.0%
Net sales by type	2020	Change	2019
(in thousands)			
Equipment Sales	\$11,480	(8.5%)	\$12,553
Adapter Sales	5,527	(0.1%)	5,535
Software and Maintenance Sales	3,321	(4.6%)	3,480
Total	\$20,328	(5.7%)	\$21,568

Net sales for the year ended December 31, 2020 declined approximately 5.7% to \$20.3 million compared to 2019 primarily as a result of COVID-19 related downturn in capital spending resulting in lower demand in Automotive Electronics and Programming Centers during 2020. On a regional basis, net sales increased approximately 13% in Asia and decreased approximately 23% in the Americas and 5% in Europe.

Order bookings were \$20.8 million for 2020, down approximately 8% compared to \$22.5 million in 2019. Backlog at December 31, 2020 and 2019 was \$3.9 million and \$2.9 million, respectively. Deferred revenue was \$1.1 million at December 31, 2020 compared to \$1.5 million at December 31, 2019.

GROSS MARGIN

	2020	Change	2019
(in thousands)		·	
Gross margin	\$10,822	(13.8%)	\$12,550
Percentage of net sales	53.2%		58.2%

Gross margin as a percentage of sales for the year ended December 31, 2020 was 53.2%, compared to 58.2% in 2019. The decline in gross margin percentage was due to the impact of channel and price mix, factory charges, including impairment obsolescence of \$291,000 for certain end of service support and first generation SentriX parts, as well as lower sales volumes relative to fixed production costs.

RESEARCH AND DEVELOPMENT

	2020	Change	2019
(in thousands)		·	
Research and development	\$6,357	(1.5%)	\$6,451
Percentage of net sales	31.3%		29.9%

Research and development ("R&D") expense decreased \$94,000 for the year ended December 31, 2020 compared to 2019. The decrease was primarily related to lower employee related costs and lower incentive compensation. R&D as a percentage of sales increased primarily due to the decline in 2020 sales.

We believe it is essential to invest in R&D to significantly enhance our existing products and to create new products as markets develop and technologies change. During 2020, we strategically invested in creating a second generation of SentriX, which was introduced in the fourth quarter. In addition to product development, a significant part of R&D spending is on creating software and support for new devices introduced by the semiconductor companies. We are currently focusing our research development efforts on strategic growth markets, including automotive electronics and IoT. We are developing technology and the SentriX product line to securely program new categories of semiconductors, including Secure Elements, Authentication Chips, and Secure Microcontrollers. We delivered new enhanced programming technology and automated handling systems for managed and secure programming in the manufacturing environment and extending the capabilities and support for our programmer architecture. Our R&D spending fluctuates based on the number, type, and the development stage of our product initiatives and projects.

SELLING, GENERAL AND ADMINISTRATIVE

	2020	Change	2019
(in thousands)			
Selling, general & administrative	\$6,891	(6.6%)	\$7,377
Percentage of net sales	33.9%		34.2%

Selling, General and Administrative ("SG&A") expenses decreased \$486,000 for the year ended December 31, 2020 compared to 2019. The decrease was primarily related to reduced sales commissions on lower sales volume, lower incentive compensation and travel related expenses and partly offset by higher consulting costs and other third party costs and stock-based compensation. Cost control measures contributed to the reduction.

INTEREST

Interest income was lower for the year ended December 31, 2020 compared to 2019, primarily due to lower invested cash balances and lower interest rates.

INCOME TAXES

	2020	Change	2019
(in thousands)			
Income tax (expense) benefit	(\$387)	1148.4%	(\$31)

Income tax (expense) increased by \$356,000 for the year ended December 31, 2020 compared to 2019. The increase was primarily a result of the withholding tax of \$257,000 on the repatriation of cash from subsidiaries in 2020. Income tax (expense) in 2020 and 2019 is primarily the result of foreign subsidiary income tax and minimal US state income tax.

The effective tax rate for 2020 of (10.8%) and 2019 of (2.7%) differed from the statutory tax rates in our tax reporting jurisdictions primarily due to the effect of valuation allowances. We have a valuation allowance of \$8.9 million and \$7.5 million as of December 31, 2020 and 2019, respectively. Our deferred tax assets and valuation allowance have been increased by approximately \$365,000 and \$348,000 associated with the requirements of accounting for uncertain tax positions as of December 31, 2020 and 2019, respectively. Given the uncertainty created by our loss history particularly in the U.S. which is where most of our net deferred tax assets are located, and the ongoing uncertain economic outlook for our industry as well as capital and geographic spending, we currently expect to continue to limit the recognition of net deferred tax assets and maintain the tax valuation allowances.

Due to repatriations of cash from China and Canada, we were required to pay \$257,000 in withholding tax during 2020, as compared with no withholding tax during 2019. Movements of cash that generated local country withholding taxes are a current tax expense that created additional deferred tax assets that resulted in additional tax valuation allowances.

INFLATION AND CHANGES IN FOREIGN CURRENCY EXCHANGE RATES

Sales and expenses incurred by foreign subsidiaries are denominated in the subsidiary's local currency and translated into U.S. Dollar amounts at average rates of exchange during the year. We recognized foreign currency transaction loss of \$(513,000) in 2020 and foreign transaction gain of \$5,000 in 2019. The transaction gains or losses resulted primarily from translation adjustments to foreign inter-company accounts and U.S. Dollar accounts held by foreign subsidiaries and sales by our German subsidiary to certain customers, which were invoiced in U.S. Dollars. Because approximately 93% of our sales are to international markets, volatile exchange rates may also impact our competitiveness and margins.

IMPAIRMENT & RELATED CHARGES

During the fourth quarter of 2020, we launched a new generation of SentriX tools and capability. We made the strategic decision to control key pieces of the technology and enhance the ability to simplify the security deployment process, own the end-to-end intellectual property and scale our business. We accelerated the transition to second generation of SentriX by immediately upgrading all customers' deployed first generation SentriX systems to the new hardware and software. This obsoleted components of the first generation hardware, software and inventory.

We also ended support for some legacy automated handlers, impairing the remaining service inventory.

As a result, certain capital equipment assets, advance payments and inventory were analyzed and determined to be impaired, totaling \$943,000. This included impairment of \$652,000, consisting of \$252,000 of equipment and software, \$400,000 of prepaid royalties, as well as impairment related charges of \$291,000, due to inventory obsolescence (cost of goods sold) for end of certain product support.

FINANCIAL CONDITION:

LIQUIDITY AND CAPITAL RESOURCES

	2020	Change	2019
(in thousands)			
Working capital	\$18,059	(\$438)	\$18,497

At December 31, 2020, our principal sources of liquidity consisted of existing cash and cash equivalents which increased \$231,000 primarily due to shifts in working capital. Our working capital decreased in 2020 due to our operating loss offset in part by the CARES Act acceleration of the AMT credit refund to current assets. Our current ratio was 4.5 and 4.4 for December 31, 2020 and 2019, respectively. The company continues to have no debt.

Although we have no significant external capital expenditure plans currently, we expect to continue to carefully make and manage capital expenditures to support our business. We plan to increase our internally developed rental, security provisioning, sales demonstration and test equipment as we develop and release new products. Capital expenditures are currently expected to be funded by existing and internally generated funds.

As a result of our cyclical and seasonal industry, significant product development, customer support and selling and marketing efforts, we have required substantial working capital to fund our operations. We have tried to balance our level of development spending with the goal of profitable operations or managing down business levels related to COVID-19. We have implemented or have initiatives to implement geographic shifts in our operations, optimize real estate usage, reduce exposure to the impact of currency volatility and tariffs, increase product development differentiation, and reduce costs.

We believe that we have sufficient cash or working capital available under our operating plan to fund our operations and capital requirements through at least the next one-year period. We may require additional cash at the U.S. headquarters, which could cause potential repatriation of cash that is held in our foreign subsidiaries. We have liquidated our subsidiary in Canada and repatriated its cash. For any repatriation, there may be tax and other impediments to any repatriation actions. As many repatriations typically have associated withholding taxes, those withheld will be a current tax without generating a current or deferred tax benefit. Our working capital may be used to fund possible losses, business growth, project initiatives, share repurchases and business development initiatives including acquisitions, which could reduce our liquidity and result in a requirement for additional cash before that time. Any substantial inability to achieve our current business plan could have a material adverse impact on our financial position, liquidity, or results of operations and may require us to reduce expenditures and/or seek possible additional financing.

OFF-BALANCE SHEET ARRANGEMENTS

Except as noted in the accompanying consolidated financial statements in Note 6, "Operating Lease Commitments" and Note 7, "Other Commitments", we had no material off-balance sheet arrangements.

SHARE REPURCHASE PROGRAMS

Data I/O did not offer a share repurchase program in 2020. In August of 2019, Data I/O completed the share repurchase program authorized in 2018.

NON-GENERALLY ACCEPTED ACCOUNTING PRINCIPLES (GAAP) FINANCIAL MEASURES

Earnings Before Interest, Taxes, Depreciation, and Amortization ("EBITDA") and Adjusted EBITDA excluding equity compensation and impairment & related charges (non-cash, one-time items) are set forth below. Non-GAAP financial measures should not be considered a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP. We believe that these non-GAAP financial measures provide meaningful supplemental information regarding our results and facilitate the comparison of results.

During the fourth quarter of 2020, certain capital equipment assets, advance payments and inventory were analyzed and determined to be impaired totaling \$943,000. This included impairment of assets consisting of \$252,000 of equipment and software, \$400,000 of prepaid royalties, of \$652,000 as well as impairment related charges of \$291,000 due primarily to end of certain product support.

A reconciliation of net income to EBITDA and Adjusted EBITDA follows:

	For Year Ended December 31,	
	2020	2019
(in thousands)		
Net Income (loss)	(\$3,964)	(\$1,187)
Interest (income)	(14)	(53)
Taxes	387	31
Depreciation and amortization	815	868
EBITDA	(\$2,776)	(\$341)
Equity compensation	1,467	1,171
Impairment & related charges	943	
Adjusted EBITDA, excluding equity compensation		
and impairment & related charges	(\$366)	\$830
(in thousands)	¢10.022	ć12.FF0
Gross Margin Impairment related obsolete inventory charges	\$10,822 291	\$12,550
		<u> </u>
Adjusted gross margin excluding		
impairment related obsolete inventory charges	\$ 11,113	\$ 12,550
Gross Margin as a % of sales	53.2%	58.2%
Impairment related obsolete inventory charges as a % of sales	1.4%	0.0%
	1.470	0.070
Adjusted gross margin excluding impairment		
related obsolete inventory charges as a % of sales	54.7%	58.2%
Impairment & related charges include the following: (in thousands)		
Impairment charges	\$652	-
Obsolete inventory charges	291	-
Total impairment & related charges	\$943	
-		

NEW ACCOUNTING PRONOUNCEMENTS

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-13, "Measurement of Credit Losses on Financial Instruments," which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses rather than incurred losses to estimate credit losses on certain types of financial instruments. We are planning to adopt the standard effective for years after December 15, 2022 and do not expect this to have a material impact on our financial statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

Item 8. Financial Statements and Supplementary Data

See pages 29 through 49.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders Data I/O Corporation

Opinion on the financial statements

Board of Directors and Stockholders

Data I/O Corporation

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of Data I/O Corporation (a Washington corporation) and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2020, and the related notes and financial statement schedule included under Item 15(a)(2) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for opinion

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

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

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

Critical audit matter

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

Net realizable value of inventory

As described further in Note 1 to the financial statements, management measures the net realizable value of inventory based on estimated reductions to inventory for obsolete, slow-moving, excess and non-salable inventory by reviewing current transactions and forecasted demand. We identified the net realizable value of inventory specifically as a critical audit matter.

The principal considerations for our determination that the net realizable value of inventory represents a critical audit matter are that the assessment of the valuation of inventory is complex and includes an estimate of forecasted demand. The demand estimate is subjective and requires the Company to consider significant assumptions such as economic conditions, technological advances, historical usage, and consumer trends, which are subject to significant uncertainty and therefore require significant auditor judgement.

Our audit procedures related to the net realizable value of inventory included the following, among others:

- obtained management's analysis of parts in inventory and expected customer demand, recalculated inputs into the analysis. This included, among other inputs, historical usage compared to quantities on hand, age, and general ledger balances.
- tested selected inventory items by making inquiries of management and evaluating the appropriateness of judgments, assumptions and documentation supporting adjustments to the reserve estimate.
- inquired with management and various staff members outside of the finance team to obtain support for selected forecast demand inputs as well as product specific trends.

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2001.

Seattle, Washington March 26, 2021

DATA I/O CORPORATION CONSOLIDATED BALANCE SHEETS (in thousands, except share data)

	December 31, 2020	December 31, 2019
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$14,167	\$13,936
Trade accounts receivable, net of allowance for		
doubtful accounts of \$66 and \$80, respectively	2,494	4,099
Inventories	5,270	5,020
Other current assets	1,319	924
TOTAL CURRENT ASSETS	23,250	23,979
Property, plant and equipment – net	1,216	1,668
Income tax receivable	-	640
Other assets	1,126	1,994
TOTAL ASSETS	\$25,592	\$28,281
LIABILITIES AND STOCKHOLDERS' EQUITY CURRENT LIABILITIES:		
Accounts payable	\$1,245	\$1,151
Accrued compensation	1,509	1,541
Deferred revenue	1,068	1,387
Other accrued liabilities	1,307	1,372
Income taxes payable	62	31
TOTAL CURRENT LIABILITIES	5,191	5,482
Operating lease liabilities	588	1,178
Long-term other payables	174	91
COMMITMENTS	-	-
STOCKHOLDERS' EQUITY		
Preferred stock -		
Authorized, 5,000,000 shares, including		
200,000 shares of Series A Junior Participating		
Issued and outstanding, none	-	-
Common stock, at stated value -		
Authorized, 30,000,000 shares		
Issued and outstanding, 8,416,335 shares as of December 31,		
2020 and 8,212,748 shares as of December 31, 2019	20,071	18,748
Accumulated earnings (deficit)	(1,456)	2,508
Accumulated other comprehensive income (loss)	1,024	274
TOTAL STOCKHOLDERS' EQUITY	19,639	21,530
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$25,592	\$28,281
See notes to consolidated financial statements		

DATA I/O CORPORATION CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share amounts)

For the Years Ended

	December 31,	
	2020	2019
Net sales Cost of goods sold Gross margin	\$20,328 <u>9,506</u> 10,822	\$21,568 9,018 12,550
Operating expenses: Research and development Selling, general and administrative Impairment Total operating expenses	6,357 6,891 652 13,900	6,451 7,377 - 13,828
Operating income (loss) Non-operating income (loss): Interest income Gain on sale of assets Foreign currency transaction gain (loss)	(3,078) 14 - (513)	(1,278) 53 64 5
Total non-operating income (loss) Income (loss) before income taxes Income tax (expense) benefit Net income (loss)	(499) (3,577) (387) (\$3,964)	122 (1,156) (31) (\$1,187)
Basic earnings (loss) per share Diluted earnings (loss) per share Weighted-average basic shares Weighted-average diluted shares	(\$0.48) (\$0.48) 8,333 8,333	(\$0.14) (\$0.14) 8,247 8,247

See notes to consolidated financial statements

DATA I/O CORPORATION CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (in thousands)

For the Years Ended December 31.

	December 31,	
	2020	2019
Net Income (loss)	(\$3,964)	(\$1,187)
Other comprehensive income:		
Foreign currency translation gain (loss)	750	(134)
Comprehensive income (loss)	(\$3,214)	(\$1,321)

See notes to consolidated financial statements

DATA I/O CORPORATION CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY (in thousands, except share amounts)

	Commo	n Stock	Accumulated	Accumulated and Other	Total
			Earnings	Comprehensive	Stockholders'
	Shares	Amount	(Deficit)	Income (Loss)	Equity
Balance at December 31, 2018	8,338,628	\$19,254	\$3,695	\$408	\$23,357
Stock options exercised	-	-	-	-	-
Repurchased shares	(301,710)	(1,464)	-	-	(1,464)
Stock awards issued, net of tax					
withholding	169,653	(243)	-	-	(243)
Issuance of stock through:					
Employee Stock Purchase Plan	6,177	30	-	-	30
Share-based compensation	-	1,171	-	-	1,171
Net income (loss)	-	-	(1,187)	-	(1,187)
Other comprehensive income gain					
(loss)	<u> </u>			(134)	(134)
Balance at December 31, 2019	8,212,748	\$18,748	\$2,508	\$274	\$21,530
Stock options exercised	-	-			-
Repurchased shares	-	-	-	-	-
Stock awards issued, net of tax					
withholding	195,773	(173)	-	-	(173)
Issuance of stock through:					
Employee Stock Purchase Plan	7,814	29	-	-	29
Share-based compensation	-	1,467	-	-	1,467
Net income (loss)	-	-	(3,964)	-	(3,964)
Other comprehensive income gain					
(loss)				750	750
Balance at December 31, 2020	8,416,335	\$20,071	(\$1,456)	\$1,024	\$19,639

See notes to consolidated financial statements

DATA I/O CORPORATION CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands)

For the Twelve Months Ended December 31.

	December 31,	
	2020	2019
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income (loss)	(\$3,964)	(\$1,187)
Adjustments to reconcile net income (loss)	,,,,	,,,,,
to net cash provided by (used in) operating activities:		
Depreciation and amortization	815	867
Gain on sale of assets	-	(64)
Equipment transferred to cost of goods sold	245	63
Share-based compensation	1,467	1,171
Impairment and related charges	943	-
Net change in:		
Trade accounts receivable	1,664	(375)
Inventories	(414)	139
Other current assets	(398)	(307)
Accounts payable and accrued liabilities	(38)	(2,031)
Deferred revenue	(380)	(98)
Other long-term liabilities	(491)	(29)
Deposits and other long-term assets	1,182	(245)
Net cash provided by (used in) operating activities	631	(2,096)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property, plant and equipment	(860)	(612)
Net proceeds from sale of assets		64
Cash provided by (used in) investing activities	(860)	(548)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net proceeds from issuance of common stock, less payments		
for shares withheld to cover tax	(144)	(213)
Repurchase of common stock		(1,464)
Cash provided by (used in) financing activities	(144)	(1,677)
Increase (decrease) in cash and cash equivalents	(373)	(4,321)
Effects of exchange rate changes on cash	604	(86)
Cash and cash equivalents at beginning of period	13,936	18,343
Cash and cash equivalents at end of period	\$14,167	\$13,936
Supplemental disclosure of cash flow information:		
Cash paid during the period for:	6407	6207
Income taxes	\$137	\$307
See notes to consolidated financial statements		

DATA I/O CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations

Data I/O Corporation ("Data I/O", "We", "Our", "Us") designs, manufactures and sells programming systems used by designers and manufacturers of electronic products. Our programming system products are used to program integrated circuits ("ICs" or "devices" or "semiconductors") with the specific unique data necessary for the ICs contained in various products, and are an important tool for the electronics industry experiencing growing use of programmable ICs. Customers for our programming system products are located around the world, primarily in Asia, Europe and the Americas. Our manufacturing operations are currently located in Redmond, Washington, United States and Shanghai, China.

Principles of Consolidation

The consolidated financial statements include the accounts of Data I/O Corporation and our wholly-owned subsidiaries. Intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

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

Significant estimates include:

- Revenue Recognition
- Allowance for Doubtful Accounts
- Inventory
- Warranty Accruals
- Tax Valuation Allowances
- Share-based Compensation

Foreign Currency Translation

Assets and liabilities of foreign subsidiaries are translated at the exchange rate on the balance sheet date. Revenues, costs and expenses of foreign subsidiaries are translated at average rates of exchange prevailing during the year. Translation adjustments resulting from this process are charged or credited to stockholders' equity. Realized and unrealized gains and losses resulting from the effects of changes in exchange rates on assets and liabilities denominated in foreign currencies are included in non-operating expense as foreign currency transaction gains and losses.

Cash and Cash Equivalents

All highly liquid investments purchased with an original maturity of 90 days or less are considered cash equivalents. We maintain our cash and cash equivalents with major financial institutions in the United States of America, which are insured by the Federal Deposit Insurance Corporation (FDIC), and in foreign jurisdictions. Deposits in U.S. banks exceed the FDIC insurance limit. We have not experienced any losses on our cash and cash equivalents. Cash and cash equivalents held in foreign bank accounts in China and Germany, totaled (in millions) \$6.8 at December 31, 2020 and \$8.7 at December 31, 2019.

Fair Value of Financial Instruments

Certain financial instruments are carried at cost on the consolidated balance sheets, which approximates fair value due to their short-term, highly liquid nature. These instruments include cash and cash equivalents, accounts receivable, accounts payable and accrued expenses, and other short-term liabilities.

Accounts Receivable

The majority of our accounts receivable are due from companies in the electronics manufacturing industries. Credit is extended based on an evaluation of a customer's financial condition and, generally, collateral is not required. Accounts receivable are typically due within 30 to 60 days and are stated at amounts due from customers net of an allowance for doubtful accounts. Accounts receivable outstanding longer than the contractual payment terms are considered past due. We determine the allowance by considering a number of factors, including the length of time trade accounts receivable are past due, the industry and geographic payment practices involved, our previous bad debt experience, the customer's current ability to pay their obligation to us, and the condition of the general economy and the industry as a whole. We write off accounts receivable when they become uncollectible, and payments subsequently received on such receivables are credited to the allowance for doubtful accounts. Interest may be charged, at the discretion of management and according to our standard sales terms, beginning on the day after the due date of the receivable. However, interest income is subsequently recognized on these accounts either to the extent cash is received, or when the future collection of interest and the receivable balance is considered probable by management.

Inventories

Inventories are stated at the lower of cost or net realizable value with cost being the currently adjusted standard cost, which approximates cost on a first-in, first-out basis. We estimate changes to inventory for obsolete, slow-moving, excess and non-salable inventory by reviewing current transactions and forecasted product demand. We evaluate our inventories on an item by item basis and record an adjustment (lower of cost or net realizable value) accordingly.

Property, Plant and Equipment

Property, plant and equipment, including leasehold improvements, are stated at cost and depreciation is calculated over the estimated useful lives of the related assets or lease terms on the straight-line basis. We depreciate substantially all manufacturing and office equipment over periods of three to seven years. We depreciate leasehold improvements over the remaining portion of the lease or over the expected life of the asset if less than the remaining term of the lease.

We regularly review all of our property, plant and equipment for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable. If the total of future undiscounted cash flows is less than the carrying amount of these assets, an impairment loss, if any, based on the excess of the carrying amount over the fair value of the assets, is recorded. Based on this evaluation, approximately \$252,000 of impairment was noted and recorded for property, plant and equipment for the year ended December 31, 2020. For the year ended December 31, 2019, no impairment was noted or recorded for property, plant and equipment.

Patent Costs

We expense external costs, such as filing fees and associated attorney fees, incurred to obtain initial patents, but capitalize patents obtained through acquisition as intangible assets. We also expense costs associated with maintaining and defending patents subsequent to their issuance.

Income Taxes

Income taxes are computed at current enacted tax rates, less tax credits using the asset and liability method. Deferred taxes are adjusted both for items that do not have tax consequences and for the cumulative effect of any changes in tax rates from those previously used to determine deferred tax assets or liabilities. Tax provisions include amounts that are currently payable, changes in deferred tax assets and liabilities that arise because of temporary differences between the timing of when items of income and expense are recognized for financial reporting and income tax purposes, and any changes in the valuation allowance caused by a change in judgment about the realization of the related deferred tax assets. A valuation allowance is established when necessary to reduce deferred tax assets to amounts expected to be realized. The CARES Act, enacted in Q1 2020, accelerated the AMT credit refund of \$640,000 to be a current asset instead of non-current.

Share-Based Compensation

All stock-based compensation awards are measured based on estimated fair values on the date of grant and recognized as compensation expense on the straight-line single-option method. Our share-based compensation is reduced for estimated forfeitures at the time of grant and revised as necessary in subsequent periods if actual forfeitures differ from those estimates.

Revenue Recognition

Topic 606 provides a single, principles-based five-step model to be applied to all contracts with customers. It generally provides for the recognition of revenue in an amount that reflects the consideration to which the Company expects to be entitled, net of allowances for estimated returns, discounts or sales incentives, as well as taxes collected from customers when control over the promised goods or services are transferred to the customer.

We expense contract acquisition costs, primarily sales commissions, for contracts with terms of one year or less and will capitalize and amortize incremental costs with terms that exceed one year. During 2020 and 2019, the impact of capitalization of incremental costs for obtaining contracts was immaterial. We exclude sales, use, value added, some excise taxes and other similar taxes from the measurement of the transaction price.

We recognize revenue upon transfer of control of the promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. We have determined that our programming equipment has reached a point of maturity and stability such that product acceptance can be assured by testing at the factory prior to shipment and that the installation meets the criteria to be a separate performance obligation. These systems are standard products with published product specifications and are configurable with standard options. The evidence that these systems could be deemed as accepted was based upon having standardized factory production of the units, results from batteries of tests of product performance to our published specifications, quality inspections and installation standardization, as well as past product operation validation with the customer and the history provided by our installed base of products upon which the current versions were based.

The revenue related to products requiring installation that is perfunctory is recognized upon transfer of control of the product to customers, which generally is at the time of shipment. Installation that is considered perfunctory includes any installation that is expected to be performed by other parties, such as distributors, other vendors, or the customers themselves. This considers the complexity, skill and training needed as well as customer expectations regarding installation.

We enter into arrangements with multiple performance obligations that arise during the sale of a system that includes an installation component, a service and support component and a software maintenance component. We allocate the transaction price of each element based on relative selling prices. Relative selling price is based on the selling price of the standalone system. For the installation and service and support performance obligations, we use the value of the discount given to distributors who perform these components. For software maintenance performance obligations, we use what we charge for annual software maintenance renewals after the initial year the system is sold. Revenue is recognized on the system sale based on shipping terms, installation revenue is recognized after the installation is performed, and hardware service and support and software maintenance revenue is recognized ratably over the term of the agreement, typically one year. Deferred revenue includes service, support and maintenance contracts and represents the undelivered performance obligation of agreements that are typically for one year.

When we sell software separately, we recognize revenue upon the transfer of control of the software, which is generally upon shipment, provided that only inconsequential performance obligations remain on our part and substantive acceptance conditions, if any, have been met.

We recognize revenue when there is an approved contract that both parties are committed to perform, both parties rights have been identified, the contract has substance, collection of substantially all the consideration is probable, the transaction price has been determined and allocated over the performance obligations, the performance obligations including substantive acceptance conditions, if any, in the contract have been met, the obligation is not contingent on resale of the product, the buyer's obligation would not be changed in the event of theft, physical destruction or damage to the product, the buyer acquiring the product for resale has economic substance apart from us and we do not have significant obligations for future performance to directly bring about the resale of the product by the buyer. We establish a reserve for sales returns based on historical trends in product returns and estimates for new items. Payment terms are generally 30 days from shipment.

We transfer certain products out of service from their internal use and make them available for sale. The products transferred are typically our standard products in one of the following areas: service loaners, rental or test units; engineering test units; or sales demonstration equipment. Once transferred, the equipment is sold by our regular sales channels as used equipment inventory. These product units often involve refurbishing and an equipment warranty, and are conducted as sales in our normal and ordinary course of business. The transfer amount is the product unit's net book value and the sale transaction is accounted for as revenue and cost of goods sold.

The following table represents our revenues by major categories:

Net sales by type

	2020	2019
(in thousands)		
Equipment Sales	\$11,480	\$12,553
Adapter Sales	5,527	5,535
Software and Maintenance Sales *	3,321	3,480
Total	\$20,328	\$21,568

^{*} includes an insignificant amount of service and part sales

<u>Leases - Accounting Standards Codification 842</u>

Leases arise from contracts which convey the right to control the use of identified property or equipment for a period of time in exchange for consideration. Our leasing arrangements are primarily for office space we use to conduct our operations. In addition, there are automobiles and a small amount of office equipment leased. We determine whether contracts include a lease at the inception date, which is generally upon contract signing, considering factors such as whether the contract includes an asset which is physically distinct, which party obtains substantially all of the capacity and economic benefit of the asset, and which party directs how, and for what purpose, the asset is used during the contractual period of use. Our leases commence when the lessor makes the asset available for our use. At commencement, we record a lease liability at the present value of future lease payments, net of any future lease incentives to be received. Some of our lease agreements include cancellable future periods subject to termination or extension options. We include cancellable lease periods in our future lease payments when we are reasonably certain to continue to utilize the asset for those periods. We calculate the present value of future lease payments at commencement using a discount rate which we estimate as the collateralized borrowing rate we believe that would be incurred on our future lease payments over a similar term. At commencement, we also record a corresponding right-of-use asset, which is calculated based on the amount of the lease liability, adjusted for any advance lease payments paid, initial direct costs incurred or lease incentives received prior to commencement. Right-of-use assets are subject to evaluation for impairment or disposal on a basis consistent with other long-lived assets.

Leases are classified at commencement, as either operating or finance leases. As of December 31, 2020, all of our leases are classified as operating leases. Rent expense for operating leases is recognized on the straight-line method over the term of the agreement beginning on the lease commencement date.

In accounting for leases, we utilize certain practical expedients and policy elections available under the lease accounting standard. For example, we do not record right-of-use assets or lease liabilities for leases with terms of 12 months or less. For contracts containing real estate leases, we do not combine lease and non-lease components. The primary impact of this policy election is that we do not include in our calculation of lease liabilities any fixed and non-cancelable future payments due under the contract for items such as common area maintenance, utilities and other costs. Lease-related costs which are variable rather than fixed are expensed in the period incurred.

Assumptions, judgments and estimates impacting the carrying value of our right-of-use assets and liabilities include evaluating whether an arrangement contains a lease, determining whether the lease term should include any cancellable future periods, estimating the discount rate used to calculate our lease liabilities, estimating the fair value and useful life of the leased asset for the purpose of classifying the lease as an operating or finance lease, evaluating whether a lease contract amendment represents a new lease agreement or a modification to the existing lease and evaluating our right-of-use assets for impairment.

Research and Development

Research and development costs are generally expensed as incurred.

Advertising Expense

Advertising costs are expensed as incurred. Total advertising expenses were approximately \$127,000 and \$173,000 in 2020 and 2019, respectively.

Warranty Expense

We record a liability for an estimate of costs that we expect to incur under our basic limited warranty when product revenue is recognized. Factors affecting our warranty liability include the number of units sold and historical and anticipated rates of claims and costs per claim. We normally provide a warranty for our products against defects for periods ranging from ninety days to one year. We provide for the estimated cost that may be incurred under our product warranties and periodically assess the adequacy of our warranty liability based on changes in the above factors. We record revenues on extended warranties on a straight-line basis over the term of the related warranty contracts. Service costs are expensed as incurred.

Earnings (Loss) Per Share

Basic earnings (loss) per share exclude any dilutive effects of stock options. Basic earnings (loss) per share are computed using the weighted-average number of common shares outstanding during the period. Diluted earnings per share are computed using the weighted-average number of common shares and common stock equivalent shares outstanding during the period. The common stock equivalent shares from equity awards used in calculating diluted earnings per share were 74,000 and 65,000 for the years ended December 31, 2020 and 2019, respectively. Options to purchase 25,000 and 29,752 shares of common stock were outstanding as of December 31, 2020 and 2019, respectively, but were excluded from the computation of diluted EPS for the period then ended because the options were anti-dilutive.

Diversification of Credit Risk

Financial instruments, which potentially subject us to concentrations of credit risk, consist primarily of trade receivables. Our trade receivables are geographically dispersed and include customers in many different industries. Our consolidated accounts receivable balance as of December 31, 2020 and 2019 includes foreign accounts receivable in the functional currency of our foreign subsidiaries amounting to \$587,000 and \$1,255,000, respectively. We generally do business with our foreign distributors in U.S. Dollars. We believe that risk of loss is significantly reduced due to the diversity of our end-customers and geographic sales areas. We perform on-going credit evaluations of our customers' financial condition and require collateral, such as letters of credit and bank guarantees, or prepayment whenever deemed necessary.

The following represented greater than 10% of our consolidated accounts receivable for the applicable year:

2	3
32%	35%
17%	12%
15%	12%
n/a	11%
	17% 15%

Diversification of net sales

The following represented greater than 10% of net sales for the applicable year: Percentage of Net Sales

	2020	2019	2018
Number of customers	1	1	2
Approximate percentage of net sales	12%	11%	29%
Percentage of each Percentage of each	12% n/a	11% n/a	16% 13%

COVID-19

In 2020, we had to react to the global COVID-19 pandemic. COVID-19 has impacted all aspects of our business, from customer demand, to supply chain integrity, employee safety, business processes, and financial management. As a global company, we had to manage each of these while working within the guidelines of local and national policy in the U.S., China and Germany. Our philosophy at the start of the outbreak was simple:

- 1. Keep our people and their families safe;
- 2. Keep our facilities safe and operational while we serve our customers as an essential business; and
- 3. Preserve cash.

We have managed this issue successfully to date, with no known employee transmissions in the workplace and significant preservation of our cash and working capital throughout the year. Our resilient supply chain model kept our facilities in Shanghai, China and Redmond, Washington open, and serving customers globally. We supported customers rapidly transitioning to medical device support. We did this while facing unique international travel restrictions, shipping delays, and inability to meet with customers in person. All the while we preserved and slightly grew our cash balances, while moving more cash to the U.S.

COVID-19 has continued to impact our demand, particularly capacity related, evidenced by many automotive and other plant shut downs in the second quarter, their re-openings and now, in a believed ripple effect, the impact of chip shortages on their production plans. This appears to be a short-term issue and the outlook for automotive electronics remains strong for a decade. Waves of COVID-19 infection rates have kept or re-imposed revised travel restrictions. Customers largely have not permitted inperson sales and other visits. Converting these interactions to remote and virtual means has meant new processes and technology usage.

In production, in addition to adding protective health measures for our employees, we have focused on supply chain resilience and duplicating production capability for some products in both our Shanghai, China and Redmond, USA facilities. We implemented additional supplier financial and other monitoring, as well as adding additional local suppliers and increasing inventory stock levels of key parts. Other than production employees who necessarily are onsite, most Redmond employees are working remotely with some flexibility to be onsite and this is expected to continue until COVID-19 risks are reduced by vaccination coverage.

New Accounting Pronouncements

In June 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-13, "Measurement of Credit Losses on Financial Instruments," which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses rather than incurred losses to estimate credit losses on certain types of financial instruments. We are planning to adopt the standard effective for years after December 15, 2022 and do not expect this to have a material impact on our financial statements.

NOTE 2 - ACCOUNTS RECEIVABLE, NET

	December 31,	December 31,
	2020	2019
(in thousands)		
Trade accounts receivable	\$2,560	\$4,179
Less allowance for doubtful receivables	66	80
Trade accounts receivable, net	\$2,494	\$4,099
Changes in Data I/O's allowance for doubtful accounts ar	e as follows:	
	December 31,	December 31,
	2020	2019
(in thousands)		
Beginning balance	\$80	\$75
Bad debt expense (reversal)	(14)	5
Accounts written-off	-	-
Recoveries		
Ending balance	\$66	\$80

NOTE 3 – INVENTORIES

	December 31, 2020	December 31, 2019
(in thousands)	<u> </u>	
Raw material	\$3,143	\$2,416
Work-in-process	1,204	1,832
Finished goods	923	772
Inventories	\$5,270	\$5,020

NOTE 4 – PROPERTY, PLANT AND EQUIPMENT, NET

	December 31, 2020	December 31, 2019
(in thousands)		
Leasehold improvements	\$421	\$395
Equipment	5,625	5,606
Sales demonstration equipment	963	778
	7,009	6,779
Less accumulated depreciation	5,793	5,111
Property and equipment, net	\$1,216	\$1,668

Total depreciation expense recorded for 2020 and 2019 was \$815,000 and \$867,000, respectively.

NOTE 5 – OTHER ACCRUED LIABILITIES

Other accrued liabilities consisted of the following components:

	December 31, 2020	December 31, 2019
(in thousands)		
Lease liability - short term	\$673	\$678
Product warranty	371	367
Sales return reserve	61	77
Other taxes	109	126
Other	93	124
Other accrued liabilities	\$1,307	\$1,372

The changes in our product warranty liability for the year ending December 31, 2020 are follows:

	December 31, 2020
(in thousands)	
Liability, beginning balance	\$367
Net expenses	728
Warranty claims	(728)
Accrual revisions	4
Liability, ending balance	\$371

NOTE 6 – OPERATING LEASE COMMITMENTS

We have commitments under non-cancelable operating leases and other agreements, primarily for factory and office space, with

initial or remaining terms of one year or more as follows:

For the years ending December 31:

	Operating	
	Lease Commitments	
(in thousands)		
2021	\$747	
2022	331	
2023	101	
2024	89	
2025	69	
Thereafter	85	
Total	\$1,422	
Less Imputed interest	(162)	
Total operating lease liabilities	\$1,260	

Cash paid for operating lease liabilities for the twelve months ended December 31, 2020 and 2019, respectively, was \$770,000 and \$757,000. There were three new or modified leases during the twelve months ended December 31, 2020 that are considered minor, and are accounted for in the amounts disclosed above.

The following table presents supplemental balance sheet information related to leases as of December 31, 2020:

	Year Ended December 31,	
	2020	2019
(in thousands)		
Right-of-use assets (Long-term other assets)	\$1,081	\$1,574
Lease liability-short term (Other accrued liabilities)	\$673	\$678
Lease liability-long term (Operating lease liabilities)	\$588	\$1,178

At December 31, 2020, the weighted average remaining lease term is 2.9 years and the weighted average discount rate used is 5%.

The components of our lease expense for the twelve months ended December 31, 2020 and 2019, respectively, include operating lease costs of \$692,000 and \$685,000, which includes short-term lease costs of \$34,000 and \$32,000. Variable payments were not material, and were treated as non-lease components and were recognized in the period for which the costs occur.

Our real estate facility leases are described below:

During the third quarter of 2017, we amended our lease agreement for the Redmond, Washington headquarters facility, extending the lease to July 31, 2022. Previously on June 8, 2015 the lease had been amended to relocate our headquarters to a nearby building and lower the square footage to approximately 20,460. The lease base annual rental payments during 2020 and 2019 were approximately \$361,000 and \$351,000, respectively.

In addition to the Redmond facility, approximately 24,000 square feet is leased at two foreign locations, including our sales, service, operations and engineering office located in Shanghai, China, and our German sales, service and engineering office located near Munich, Germany.

We signed a lease agreement effective November 1, 2015 that extends through October 31, 2021 for a facility located in Shanghai, China. This lease is for approximately 19,400 square feet. The lease base annual rental payments during 2020 and 2019 were approximately \$301,000 and \$305,000, respectively.

During the fourth quarter of 2016, we signed a lease agreement for a new facility located near Munich, Germany which was effective March 1, 2017 and extends through February 28, 2022 with a five year further extension to 2027. This lease is for approximately 4,895 square feet. The lease base annual rental payments during 2020 and 2019 were approximately \$62,000 and \$57,000, respectively.

NOTE 7 – OTHER COMMITMENTS

We have purchase obligations for inventory and production costs as well as other obligations such as capital expenditures, service contracts, marketing, and development agreements. Arrangements are considered purchase obligations if a contract specifies all significant terms, including fixed or minimum quantities to be purchased, a pricing structure and approximate timing of the transaction. Most arrangements are cancelable without a significant penalty, and with short notice, typically less than 90 days. At December 31, 2020, the purchase commitments and other obligations totaled \$1.3 million of which all but \$124,000 are expected to be paid over the next twelve months.

NOTE 8 – CONTINGENCIES

As of December 31, 2020, we were not a party to any legal proceedings or aware of any indemnification agreement claims, the adverse outcome of which in management's opinion, individually or in the aggregate, would have a material adverse effect on our results of operations or financial position.

NOTE 9 – STOCK AND RETIREMENT PLANS

Stock Option Plans

At December 31, 2020, there were 124,393 shares available for future grant under Data I/O Corporation 2000 Stock Compensation Incentive Plan ("2000 Plan"). At December 31, 2020, there were shares of Common Stock reserved for issuance consisting of 62,500 inducement reserve shares and 605,728 shares under the 2000 Plan. The inducement reserve shares were granted in 2019 consisting of 25,000 options and 50,000 RSU (37,500 unvested and unissued), which were not from the 2000 Plan, but were made under the terms of the 2000 Plan. During 2020, 12,500 shares were issued from the inducement reserve. Pursuant to the 2000 Plan, options are granted to our officers and key employees with exercise prices equal to the fair market value of the Common Stock at the date of grant and generally vest over four years. Options granted under the plans have a maximum term of six years from the date of grant. Stock awards are also granted under the 2000 Plan which generally vest over four years and one year for nonemployee Directors.

Employee Stock Purchase Plan

Under the Employee Stock Purchase Plan ("ESPP"), eligible employees may purchase shares of our Common Stock at six-month intervals at 95% of the fair market value on the last day of each six-month period. Employees may purchase shares having a value not exceeding ten percent of their gross compensation during an offering period. During 2020 and 2019, a total of 7,814 and 6,177 shares, respectively, were purchased under the plan at average prices of \$3.71 and \$4.88 per share, respectively. At December 31, 2020 and 2019, 31,769 and 39,249 shares were reserved for future issuance respectively.

Stock Appreciation Rights Plan

We have a Stock Appreciation Rights ("SAR") Plan under which each director, executive officer or holder of 10% or more of our Common Stock has a SAR with respect to each exercisable stock option. The SAR entitles the SAR holder to receive cash from us for the difference between the market value of the stock and the exercise price of the option in lieu of exercising the related option. SARs are only exercisable following a tender offer or exchange offer for our stock, or following approval by shareholders of Data I/O of any merger, consolidation, reorganization or other transaction providing for the conversion or exchange of more than 50% of the common shares outstanding. As no event has occurred, which would make the SARs exercisable, and no such event is deemed probable, no compensation expense has been recorded under this plan. At December 31, 2020 and 2019, there were 25,000 SARs outstanding.

Director Fee Plan

We have a Director Fee Plan available to compensate directors who are not employees of Data I/O Corporation with equity. During 2020, 20,559 shares were issued from the plan and no shares were issued from the plan in 2019. At December 31, 2020 and 2019 130,763 and 151,322 shares remain available in the plan respectively.

Retirement Savings Plan

We have a savings plan that qualifies as a cash or deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under the plan, participating U.S. employees may defer their pre-tax salary or post-tax salary if Roth is elected, subject to IRS

limitations. In fiscal years 2020 and 2019, we contributed one dollar for each dollar contributed by a participant, with a maximum contribution of four percent of a participant's eligible earnings. Our matching contribution expense for the savings plan, net of forfeitures, was approximately \$184,000 and \$239,000 in 2020 and 2019, respectively. Employer matching contributions owed to the plan were \$200,000 and \$211,000 at December 31, 2020 and 2019, respectively.

NOTE 10 – SHARE-BASED COMPENSATION

For share-based awards granted, we have recognized compensation expense based on the estimated grant date fair value method. For these awards we have recognized compensation expense using a straight-line amortization method and reduced for estimated forfeitures. The impact on our results of operations of recording share-based compensation for the year ended December 31, 2020 and 2019 was as follows:

	Year Ended December 31,	
	2020	2019
(in thousands)		
Cost of goods sold	\$44	\$28
Research and development	371	288
Selling, general and administrative	1,052	855
Total share-based compensation	\$1,467	\$1,171

An immaterial amount of share-based compensation was capitalized into inventory as overhead for the years ended December 31, 2020 and 2019, respectively.

The fair values of share-based awards for employee stock option awards were estimated at the date of grant using the Black-Scholes valuation model. The volatility and expected life of the options used in calculating the fair value of share-based awards may exclude certain periods of historical data that we considered atypical and not likely to occur in future periods. There were no options granted during the year ended December 31, 2020. The following weighted average assumptions were used to calculate the fair value of options granted during the year ended December 31, 2019:

	Employee Stock Options	
	2020	2019
Risk-free interest rates	n/a	2.31%
Volatility factors	n/a	62.05%
Expected life of the option in years	n/a	4.0
Expected dividend yield	n/a	None

The risk-free interest rate used in the Black-Scholes valuation method is based on the implied yield currently available in U.S. Treasury securities at maturity with an equivalent term. We have not recently declared or paid any dividends and do not currently have plans to do so in the future. The expected term of options represents the period that our stock-based awards are expected to be outstanding and has been determined based on historical weighted average holding periods and projected holding periods for the remaining unexercised shares. Consideration was given to the contractual terms of our stock-based awards, vesting schedules and expectations of future employee behavior. Expected volatility is based on the annualized daily historical volatility of our stock over a representative period.

The following table summarizes stock option activity under our stock option plans for the twelve months ended December 31:

		2020			2019	
	Options	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Life in Years	Options	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Life in Years
Outstanding at beginning of						
year	25,000	\$4.98		25,000	\$8.03	
Granted	-	-		25,000	4.98	
Exercised	-	-		-	0.00	
Cancelled, Expired or						
Forfeited				(25,000)	8.03	
Outstanding at end of year	25,000	\$4.98	4.33	25,000	\$4.98	5.34
Vested or expected to vest at						
the end of the period	24,068	\$4.98	4.33	24,723	\$4.98	5.34
Exercisable at end of year	9,375	\$4.98	4.33	12,500	\$4.98	5.34

The aggregate intrinsic value of outstanding options is \$0. There were no stock option awards exercised in 2020.

Restricted stock award activity including performance-based stock award activity under our share-based compensation plan was as follows:

	2	2020		019
	Awards	Weighted - Average Grant Date Fair Value	Awards	Weighted - Average Grant Date Fair Value
Outstanding at beginning of year	536,403	\$5.44	558,856	\$6.06
Granted	383,951	3.02	276,700	4.57
Vested	(230,901)	5.16	(224,089)	5.30
Cancelled	(46,225)	4.58	(75,064)	7.30
Outstanding at end of year	643,228	\$4.16	536,403	\$5.44

During the years ended December 31, 2020 and 2019, 55,687 and 54,436 shares respectively were withheld from issuance related to restricted stock units vesting and stock option exercises to cover employee taxes and stock options exercise price.

The remaining unamortized expected future compensation expense and remaining amortization period associated with unvested option grants and restricted stock awards are:

	December 31, 2020	December 31, 2019
Unamortized future compensation expense	\$2,017,501	\$2,351,324
Remaining weighted average amortization period in years	2.35	2.40

NOTE 11 – SHARE REPURCHASE PROGRAMS

Data I/O did not offer a share repurchase program in 2020. In August of 2019, Data I/O completed the share repurchase program authorized in 2018.

NOTE 12 – INCOME TAXES

Components of income (loss) before taxes:

Deferred tax expense (benefit) – U.S. federal

Total income tax expense (benefit)

Year Ended December 31,	
2020	2019
(\$4,451)	(\$2,518)
874	1,362
(\$3,577)	(\$1,156)
Year Ended December 31,	
2020	2019
\$0	(\$42)
(2)	8
389	65
387	31
	2020 (\$4,451) 874 (\$3,577) Year Ended Dece 2020 \$0 (2) 389

A reconciliation of our effective income tax and the U.S. federal tax rate is as follows:

	Year Ended December 31,	
	2020	2019
(in thousands)		_
Statutory tax	(\$751)	(\$243)
State and foreign income tax, net of federal income tax benefit	151	(230)
Valuation allowance for deferred tax assets	1,513	568
Foreign sourced deemed dividend income	(394)	-
Stock based compensation	(136)	(177)
Other	4	113
Total income tax expense (benefit)	\$387	\$31

\$387

\$31

The tax effects of temporary differences that gave rise to significant portions of the deferred tax assets are presented below:

	Year Ended December 31,	
	2020	2019
(in thousands)		
Deferred income tax assets:		
Allowance for doubtful accounts	\$10	\$13
Inventory and product return reserves	573	464
Compensation accruals	1,973	1,723
Accrued liabilities	179	129
Book-over-tax depreciation and amortization	91	25
Foreign net operating loss carryforwards	53	3
U.S. net operating loss carryforwards	3,739	2,904
U.S. credit carryforwards	2,345	2,280
·	8,963	7,541
Valuation Allowance	(8,963)	(7,541)
Total Deferred Income Tax Assets	\$ -	\$ -

The valuation allowance for deferred tax assets increased \$1,422,000 and \$571,000 during the years ended December 31, 2020 and 2019, respectively. The net deferred tax assets have a full valuation allowance provided due to uncertainty regarding our ability to utilize such assets in future years. This full valuation allowance evaluation is based upon our volatile history of losses and the cyclical nature of our industry and capital spending. Credit carryforwards consist primarily of research and experimental and foreign tax credits. We intend to continue to reinvest foreign earnings of our operating subsidiaries.

U.S. net operating loss carryforwards are \$17.8 million at December 31, 2020 with expiration years from 2022 to 2034. Utilization of net operating loss and credit carryforwards is subject to certain limitations under Section 382 of the Internal Revenue Code of 1986, as amended.

The gross changes in uncertain tax positions resulting in unrecognized tax benefits are presented below:

	Year Ended December 31,	
	2020	2019
(in thousands)		
Unrecognized tax benefits, opening balance	\$348	\$308
Prior period tax position increases	-	10
Additions based on tax positions related to current year	17	30
Unrecognized tax benefits, ending balance	\$365	\$348

Historically, we have incurred minimal interest expense and no penalties associated with tax matters. We have adopted a policy whereby amounts related to penalties associated with tax matters are classified as general and administrative expense when incurred and amounts related to interest associated with tax matters are classified as interest income or interest expense.

Tax years that remain open for examination include 2017, 2018, 2019 and 2020 in the United States of America. In addition, various tax years from 2002 to 2014 may be subject to examination in the event that we utilize the net operating losses and credit carryforwards from those years in our current or future year tax returns.

NOTE 13 – SEGMENT AND GEOGRAPHIC INFORMATION

We consider our operations to be a single operating segment, focused on the design, manufacturing and sale of programming systems used by designers and manufacturers of electronic products.

Major operations outside the U.S. include sales, engineering and service support subsidiaries in Germany as well as in China, which also manufactures some of our products.

The following tables provide summary operating information by geographic area:

	Year Ended December 31,	
(in thousands)	2020	2019
Net sales:		_
U.S.	\$1,516	\$1,735
Europe	8,415	8,828
Rest of World	10,397	11,005
	\$20,328	\$21,568
Included in Europe and Rest of World are the following significant balances:		
Germany	\$3,851	\$2,507
China	\$3,490	\$2,934
Operating income:		
U.S.	(\$713)	\$317
Europe	(1,698)	(1,108)
Rest of World	(667)	(487)
	(\$3,078)	(\$1,278)
Identifiable assets:		
U.S.	\$13,858	\$12,818
Europe	5,878	5,917
Rest of World	5,856	9,546
	\$25,592	\$28,281

NOTE 14 - IMPAIRMENT AND RELATED CHARGES

During the fourth quarter of 2020, we launched a new generation of SentriX tools and capability. We made the strategic decision to control key pieces of the technology and enhance the ability to simplify the security deployment process, own the end-to-end intellectual property and scale our business. We accelerated the transition to second generation of SentriX by immediately upgrading all customers' deployed first generation SentriX systems to the new hardware and software. This obsoleted components of the first generation hardware, software and inventory.

We also ended support for some legacy automated handlers, impairing the remaining service inventory.

As a result, certain capital equipment assets, advance payments and inventory were analyzed and determined to be impaired, totaling \$943,000. This included impairment of \$652,000, consisting of \$252,000 of equipment and software, \$400,000 of prepaid royalties, as well as impairment related charges of \$291,000, due to inventory obsolescence (cost of goods sold) for end of certain product support.

NOTE 15 – SUBSEQUENT EVENTS

In preparing the financial statements, the Company has reviewed all known events which have occurred after December 31, 2020 through March 26, 2021, the date on which the financial statements are available for issuance, for potential recognition or disclosure in the consolidated financial statements and footnotes.

There were no subsequent events which would require additional disclosures to the financial statements other than those already disclosed throughout the Notes to Consolidated Financial Statements.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

(a) Evaluation of disclosure controls and procedures.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act) as of the end of the period covered by this report (the "Evaluation Date"). Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of the Evaluation Date, our disclosure controls and procedures were effective at the reasonable assurance level. Disclosure controls are controls and procedures designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls are also designed to ensure that such information is accumulated and communicated to our management, including the CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

(b) Management's Report on Internal Control Over Financial Reporting.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control systems are designed to provide reasonable assurance to the Company's management and board of directors regarding reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Internal control over financial reporting is defined in Rule 13a-15(f) promulgated under the Exchange Act and 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 the assets of the company;
- (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and
- (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

All internal controls, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statements preparation and presentation.

Our management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2020. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control – Integrated Framework (2013). Based on this assessment our Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2020, our internal control over financial reporting was effective.

This annual report does not include an attestation report of the company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the company's registered public accounting firm pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act, which permanently exempts smaller reporting companies from complying with Section 404(b) of the Sarbanes-Oxley Act of 2002.

(c) Changes in internal controls.

There were no changes made in our internal controls during the period covered by this report that has materially affected or is reasonably likely to materially affect our internal control over financial reporting.

Item 9B Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information regarding the Registrant's directors is set forth under "Election of Directors" in our Proxy Statement relating to our annual meeting of shareholders to be held on May 20, 2021 and is incorporated herein by reference. Such Proxy Statement will be filed within 120 days of our year-end. Information regarding the Registrant's executive officers is set forth in Item 1 of Part I herein under the caption "Executive Officers of the Registrant."

Code of Ethics

We have adopted a Code of Ethics that applies to all directors, officers and employees of Data I/O, including the Chief Executive Officer and Chief Financial Officer. The key principles of the Code of Ethics are to act legally and with integrity in all work for Data I/O. The Code of Ethics is posted on the corporate governance page of our website:

http://www.dataio.com/Company/InvestorRelations/CorporateGovernance.aspx

We will post any amendments to our Code of Ethics on our website. In the unlikely event that the Board of Directors approves any sort of waiver to the Code of Ethics for our executive officers or directors, information concerning such waiver will also be posted on our website. In addition to posting information regarding amendments and waivers on our website, the same information will be included in a Current Report on Form 8-K within four business days following the date of the amendment or waiver, unless website posting of such amendments or waivers is permitted by NASDAQ's rules.

Item 11. Executive Compensation

Information called for by Part III, Item 11, is included in our Proxy Statement relating to our annual meeting of shareholders to be held on May 20, 2021 and is incorporated herein by reference. The information appears in the Proxy Statement under the caption "Executive Compensation." Such Proxy Statement will be filed within 120 days of our year-end.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information called for by Part III, Item 12, is included in our Proxy Statement relating to our annual meeting of shareholders to be held on May 20, 2021 and is incorporated herein by reference. The information appears in the Proxy Statement under the caption "Voting Securities and Principal Holders." Such Proxy Statement will be filed within 120 days of our year end.

Equity Compensation Plan Information

The following table gives information about our Common Stock that may be issued upon the exercise of options and rights under all of our existing equity compensation plans as of December 31, 2020. See Notes 9 and 10 of "Notes to Consolidated Financial Statements."

	(a) Number of securities to be issued upon the exercise of outstanding options, warrants and rights	(b) Weighted– average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by the security holders (1) (2)	3,175	\$4.90	286,925
Equity compensation plans not approved by the security holders (3)	25,000	\$4.98	
Total	28,175	\$4.97	286,925

- (1) Represents shares of our Common Stock issuable pursuant to the Data I/O Corporation 2000 Stock Compensation Incentive Plan, 1982 Employee Stock Purchase Plan and 1996 Director Fee Plan. Table excludes unvested restricted stock awards of 605,728 from the 2000 Plan.
- Stock Appreciation Rights Plan ("SAR") provides that directors, executive officers or holders of 10% or more of our Common Stock have an accompanying SAR with respect to each exercisable option. While the plan has been approved by the security holders, no amounts are included in columns (a), (b), or (c) relating to the SAR.
- (3) Inducement grant to Michael Tidwell of 25,000 non-qualified stock options. Table excludes unvested 2019 restricted stock inducement grant of 37,500 to Michael Tidwell.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is contained in, and incorporated by reference from, the Proxy Statement for our 2020 Annual Meeting of Shareholders under the caption "Certain Relationships and Related Transactions."

Item 14. Principal Accounting Fees and Services

The information required by this Item with respect to principal accountant fees and services is incorporated by reference to the section captioned "Principal Accountant's Fees and Services" in the Proxy Statement relating to our annual meeting of shareholders to be held on May 20, 2021. Such Proxy Statement will be filed within 120 days of our year-end.

PART IV

Item 15. Exhibits, Financial Statement Schedules

Executive Compensation Plans and Arrangements

The following list is a subset of the list of exhibits described below and contains all compensatory plans, contracts or arrangements in which any director or executive officer of Data I/O is a participant, unless the method of allocation of benefits thereunder is the same for management and non-management participants:

- (1) Amended and Restated 1982 Employee Stock Purchase Plan. See Exhibit 10.5.
- (2) Data I/O Corporation Tax Deferral Retirement Plan and Trust with Great West Financial (formerly Orchard Trust Company). See Exhibits 10.15, 10.16, 10.17, 10.30 and 10.31.

Amended and Restated 1983 Stock Appreciation Rights Plan. See Exhibit 10.1. (4) (5) Amended and Restated Executive Agreements. See Exhibit 10.8, 10.20, 10.23 and 10.27. (6) 1996 Director Fee Plan. See Exhibit 10.4. (7) Data I/O Corporation 2000 Stock Compensation Incentive Plan. See Exhibit 10.6, 10.11, 10.22 and 10.26. (8) Form of Option Agreement. See Exhibit 10.7. (9) Form of Indemnification Agreement. See Exhibit 10.18. Letter Agreement with Anthony Ambrose. See Exhibit 10.21. (10)(11) Letter Agreement with Rajeev Gulati. See Exhibit 10.24. (12) Form of Restricted Stock Agreement. See Exhibit 10.12. (13) Letter Agreement with Joel S. Hatlen. See Exhibit 10.28. (14) Form of Executive Agreement. See Exhibit 10.27. (15) Form of Restricted Stock Unit Award Agreement. See Exhibit 10.25. (16) Letter Agreement with Michael Tidwell. See Exhibit 10.36. (a) **List of Documents Filed as a Part of This Report: Page** (1) Index to Financial Statements: Report of Independent Registered Public Accounting Firm 29 Consolidated Balance Sheets as of December 31, 2020 and December 31, 2019 31 Consolidated Statements of Operations for each of the two years ended December 31, 2020 and December 31, 2019 32 Consolidated Statements of Comprehensive Income (Loss) for each of the two years ended December 31, 2020 and December 31, 2019 33 Consolidated Statements of Stockholders' Equity for each of the two years ended December 31, 2020 and December 31, 2019 34 Consolidated Statements of Cash Flows for each of the two years ended December 31, 2020 and December 31, 2019 35 Notes to Consolidated Financial Statements 36 (2) Index to Financial Statement Schedules: Schedule II – Consolidated Valuation and Qualifying Accounts 59 All other schedules not listed above have been omitted because the required information is included

Summary of Amended and Restated Management Incentive Compensation Plan. See Exhibit 10.2.

(3)

in the consolidated financial statements or the notes thereto, or is not applicable or required.

(3) Index to Exhibits:

3 Articles of Incorporation:

- 3.1 Data I/O's restated Articles of Incorporation filed November 2, 1987 (Incorporated by reference to Exhibit 3.1 of Data I/O's 1987 Annual Report on Form 10-K (File No. 0-10394) and attached as a PDF to Exhibit 3.1 in our 2017 Annual Report on Form 10-K).
- 3.2 Data I/O's Bylaws as amended and restated as of July 20, 2011 (Incorporated by reference to Data I/O's Current Report on Form 8-K filed July 26, 2011).
- 3.3 Certification of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock (Incorporated by reference to Exhibit 1 of Data I/O's Registration Statement on Form 8-A filed March 13, 1998 (File No. 0-10394)).

4 Instruments Defining the Rights of Security Holders, Including Indentures:

4.1 Rights Agreement dated as of April 4, 1998, between Data I/O Corporation and ChaseMellon Shareholder Services, L.L.C. as Rights Agent, which includes: as Exhibit A thereto, the Form of Right Certificate; and, as Exhibit B thereto, the Summary of Rights to Purchase Series A Junior Participating Preferred Stock (Incorporated by reference to Data I/O's Current Report on Form 8-K filed on March 13, 1998).

10 Material Contracts:

- 10.1 Amended and Restated 1983 Stock Appreciation Rights Plan dated February 3, 1993 (Incorporated by reference to Exhibit 10.23 of Data I/O's 1992 Annual Report on Form 10-K (File No. 0-10394) and attached as a PDF to Exhibit 10.1 in our 2017 Annual Report on Form 10-K).
- 10.2 Amended and Restated Management Incentive Compensation Plan dated January 1, 1997 (Incorporated by reference to Exhibit 10.25 of Data I/O's 1997 Annual Report on Form 10-K (File No. 0-10394)).
- 10.3 Amended and Restated Performance Bonus Plan dated January 1, 1997 (Incorporated by reference to Exhibit 10.26 of Data I/O's 1997 Annual Report on Form 10-K (File No. 0-10394)).
- 10.4 Amended and Restated Data I/O Corporation 1996 Director Fee Plan (Incorporated by reference to Exhibit 10.32 of Data I/O's 1997 Annual Report on Form 10-K (File No. 0-10394)).
- 10.5 Amended and Restated 1982 Employee Stock Purchase Plan dated May 16, 2003 (Incorporated by reference to Data I/O's 2003 Proxy Statement dated March 31, 2003).
- 10.6 Amended and Restated Data I/O Corporation 2000 Stock Compensation Incentive Plan dated May 24, 2006 (Incorporated by reference to Data I/O's 2006 Proxy Statement dated April 6, 2006).
- 10.7 Form of Option Agreement (Incorporated by reference to Data I/O's 2004 Annual Report on Form 10-K (File No. 0-10394)).
- 10.8 Amended and Restated Executive Agreement with Joel S. Hatlen dated December 31, 2011 (Incorporated by reference to Data I/O's 2011 Annual Report on Form 10K (File No. 0-10394)).

- 10.9 Lease, Redmond East Business Campus between Data I/O Corporation and Carr Redmond PLLC dated February 28, 2006 (Incorporated by reference to Data I/O's 2005 Annual Report on Form 10K (File No. 0-10394)).
- 10.10 Second Amendment to Lease, (Redmond East) between Data I/O Corporation and Arden Realty Limited Partnership, made as of January 31, 2011. (Incorporated by reference to Data I/O's 2010 Annual Report on Form 10-K (File No. 0-10394)).
- 10.11 Amended and Restated Data I/O Corporation 2000 Stock Compensation Incentive Plan approved May 17, 2011 (Incorporated by reference to Data I/O's 2011 Proxy Statement filed April 5, 2011).
- 10.12 Form of Restricted Stock Award Agreement (Incorporated by reference to Exhibit 10.29 of Data I/O's June 30, 2006 Quarterly Report on Form 10-Q (File No. 0-10394)).
- 10.13 Patent Purchase Agreement (Incorporated by reference to Data I/O's Current Report on Form 8-K filed on March 25, 2008)).
- 10.14 First Amendment to the Patent Purchase Agreement (Incorporated by reference to Data I/O's Current Report on Form 8-K filed on March 25, 2008).
- 10.15 Great West Financial (formerly Orchard Trust Company) Defined Contribution Prototype Plan and Trust (Incorporated by reference to Data I/O's 2007 Annual Report on Form 10-K (File No. 0-10394)).
- 10.16 Great West Financial (formerly Orchard Trust Company) Non-standardized 401(k) Plan (Incorporated by reference to Data I/O's 2007 Annual Report on Form 10-K (File No. 0-10394)).
- 10.17 Great West Financial (formerly Orchard Trust Company) Defined Contribution Prototype Plan and Trust Amendment for Pension Protection Act and Heart Act. (Incorporated by reference to Data I/O's 2009 Annual Report on Form 10-K (File No. 0-10394)).
- 10.18 Form of Indemnification Agreement. (Incorporated by reference to Data I/O's 2010 Annual Report on Form 10-K (File No. 0-10394)).
- 10.19 Asset Purchase Agreement dated April 29, 2011, with the Miller Trust, for acquisition of Software Technology (Incorporated by reference to Data I/O's Current Report on Form 8-K filed May 3, 2011 with portions omitted pursuant to a confidential treatment request, and by reference to Data I/O's Form 10-Q filed April 3, 2012, which included the redacted portions that had been made in the original Form 8-K filing).
- 10.20 Executive Agreement with Anthony Ambrose dated October 25, 2012. (Incorporated by reference to Data I/O's 2012 Annual Report on Form 10-K (File No. 0-10394)).
- 10.21 Letter Agreement with Anthony Ambrose (Incorporated by reference to Data I/O's Current Report on Form 8-K filed on October 29, 2012).
- 10.22 Amended and Restated Data I/O Corporation 2000 Stock Compensation Incentive Plan approved May 10, 2012 (Incorporated by reference to Data I/O's 2012 Proxy Statement filed April 3, 2012).
- 10.23 Executive Agreement with Rajeev Gulati dated July 25, 2013. (Incorporated by reference to Data I/O's 2013 Annual Report on Form 10-K (File No. 0-10394)).

- 10.24 Letter Agreement with Rajeev Gulati (Incorporated by reference to Data I/O's Current Report on Form 8-K filed on July 31, 2013).
- 10.25 Form of Restricted Stock Unit Award Agreement (Incorporated by reference to Exhibit 10.29 of Data I/O's March 31, 2014 Quarterly Report on Form 10-Q (File No. 0-10394)).
- 10.26 Amended and Restated Data I/O Corporation 2000 Stock Compensation Incentive Plan approved April 30, 2014 (Incorporated by reference to Exhibit 10.30 of Data I/O's March 31, 2014 Quarterly Report on Form 10-Q (File No. 0-10394)).
- 10.27 Form of Executive Agreement (Incorporated by reference to Exhibit 10.31 of Data I/O's June 30, 2014 Quarterly Report on Form 10-Q (File No. 0-10394)).
- 10.28 Letter Agreement with Joel S. Hatlen (Incorporated by reference to Exhibit 10.32 of Data I/O's June 30, 2014 Quarterly Report on Form 10-Q (File No. 0-10394)).
- 10.29 Third Amendment to Lease, (Redmond East) between Data I/O Corporation and Arden Realty Limited Partnership, made as of June 1, 2015 (Incorporated by reference to Exhibit 10.29 of Data I/O's June 30, 2015 Quarterly Report on Form 10-Q (File No. 0-10394)).
- 10.30 Great West Financial Adoption Agreement #005 Non-standardized 401(k) Plan (Incorporated by reference to Data I/O's 2015 Annual Report on Form 10-K (File No. 0-10394)).
- 10.31 Great West Financial Adoption Agreement #005 Non-standardized 401(k) Plan (Incorporated by reference to Data I/O's 2016 Annual Report on Form 10-K (File No. 0-10394)).
- 10.32 Negotiation Protocol for the Purchase of Data I/O's PSV7000, a supply agreement executed July 20, 2016, between Data I/O Corporation and Bosch Car Multimedia Group (Incorporated by reference to Exhibit 10.31 of Data I/O's September 30, 2016 Quarterly Report on Form 10-Q (File No. 0-10394)). (Portions of this exhibit have been omitted based on confidential treatment granted by the SEC. The omitted portions of these exhibits have been filed separately with the SEC. The registrant undertakes to furnish on a supplemental basis a copy of any omitted schedules to the Securities and Exchange Commission upon request.).
- 10.34 Fifth Amendment to Lease, between Data I/O Corporation and BRE WA OFFICE OWNER LLC, made as of September 12, 2017 (Incorporated by reference to Data I/O's September 30, 2017 Quarterly Report on Form 10-Q (File No. 0-10394)).
- 10.35 1st Amendment to Negotiation Protocol executed on September 24,2018 between Data I/O Corporation and Robert Bosch GmbH (Incorporated by reference to Exhibit 10.35 of Data I/O's September 30, 2018 Quarterly Report on Form 10-Q (File No. 0-10394)). (Portions of this exhibit have been omitted based on a request for confidential treatment made to the SEC. The omitted portions of these exhibits have been filed separately with the SEC. The registrant undertakes to furnish on a supplemental basis a copy of any omitted schedules to the Securities Exchange Commission upon request.).
- 10.36 Letter Agreement with Michael Tidwell (Incorporated by reference to Form 8-K filed on May 1, 2019).
- 21.1 Subsidiaries of the Registrant

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23.1 Consent of Independent Registered Public Accounting Firm

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31 **Certification – Section 302:**

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65
66

101 Interactive Date Files Pursuant to Rule 405 of Regulation S-T

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

DATA I/O CORPORATION

(REGISTRANT)

DATED: March 26 2021

By: <u>/s/Anthony Ambrose</u> Anthony Ambrose President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

NAME & DATE		TITLE
By: <u>/s/Anthony Ambrose</u> Anthony Ambrose	March 26, 2021	President and Chief Executive Officer (Principal Executive Officer), Director
By: <u>/s/Joel S. Hatlen</u> Joel S. Hatlen	March 26, 2021	Chief Operating and Financial Officer Vice President Secretary, Treasurer (Principal Financial and Accounting Officer)
By: <u>/s/Douglas W. Brown</u> Douglas W. Brown	March 26, 2021	Director
By: <u>/s/Alan B. Howe</u> Alan B. Howe	March 26, 2021	Director
By: <u>/s/Mark J. Gallenberger</u> Mark J. Gallenberger	March 26, 2021	Director
By: <u>/s/Sally A. Washlow</u> Sally A. Washlow	March 26, 2021	Director

DATA I/O CORPORATION SCHEDULE II – CONSOLIDATED VALUATION AND QUALIFYING ACCOUNTS

	Balance at Beginning of Period	Charged/ (Credited) to Costs and Expenses	Deductions- Describe	Balance at End of Period
(in thousands)				
Year Ended December 31, 2019:				
Allowance for bad debts	\$75	\$5	\$ - (1)	\$80
Year Ended December 31, 2020:				
Allowance for bad debts	\$80	(\$14)	\$ - (1)	\$66

⁽¹⁾ Uncollectable accounts written off, net of recoveries

DATA I/O CORPORATION

DESCRIPTION OF DATA I/O CORPORATION'S COMMON STOCK

The common stock of Data I/O Corporation is its only class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**").

The following description of our Common Stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Restated Articles of Incorporation and Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock (the "**Articles**") and our Amended and Restated Bylaws (the "**Bylaws**"), each of which attached as exhibit to the Annual Report on Form 10-K. We are incorporated in the State of Washington and are subject to the Washington Business Corporation Act, Title 23B of the Revised Code of Washington.

Authorized Capital Shares

Our authorized capital shares are thirty-five million (35,000,000), consisting of thirty million (30,000,000) shares of Common Stock ("**Common Stock**"), and five million (5,000,000) shares of Preferred Stock. Two hundred thousand (200,000) shares of Series A Junior Participating Preferred Stock have been designated. The outstanding shares of our Common Stock are fully paid and nonassessable. There are no shares of Preferred Stock outstanding.

Voting Rights

Holders of Common Stock are entitled to one vote per share on all matters voted on by the shareholders, including the election of directors. Our Common Stock does not have cumulative voting rights.

Dividend Rights

The holders of Common Stock are entitled to receive dividends, if any, as may be declared from time to time by the Board of Directors in its discretion out of funds legally available for the payment of dividends.

Liquidation Rights

Holders of Common Stock will share ratably in all assets legally available for distribution to our shareholders in the event of dissolution.

Other Rights and Preferences

Our Common Stock has no sinking fund or redemption provisions or preemptive, conversion or exchange rights. Holders of Common Stock may act by unanimous written consent.

Potential Limitations on Rights of Holders of Common Stock

Our Articles authorize our board of directors to issue up to 5,000,000 shares of Preferred Stock and to determine the price, rights, preferences, privileges and restrictions, including voting rights, of those shares without any further vote or action by the shareholders. Two hundred thousand (200,000) shares of Series A Junior Participating Preferred Stock have been designated, but none are outstanding. The rights of the holders of Common Stock may be subject to, and may be adversely affected by, the rights of the holders of any Preferred Stock that may be issued in the future.

Listing

The Common Stock is traded on The Nasdaq Stock Market LLC under the trading symbol "DAIO."

DATA I/O CORPORATION

SUBSIDIARIES OF THE REGISTRANT

The following table indicates the name, jurisdiction of incorporation and basis of ownership of each of Data I/O's subsidiaries:

Name of Subsidiary	State or Jurisdiction of Organization	Percentage of Voting Securities Owned
Data I/O International, Inc.	Washington	100%
RTD, Inc.	Washington	100%
Data I/O FSC International, Inc.	Territory of Guam	100%
Data I/O GmbH	Germany	100%
Data I/O Electronics (Shanghai) Co., Ltd.	China	100%

EXHIBIT 23.1

March 26, 2021

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated March 26, 2021, with respect to the consolidated financial statements included in the Annual Report of Data I/O Corporation on Form 10-K for the year ended December 31, 2020. We consent to the incorporation by reference of said report in the Registration Statements of Data I/O Corporation on Forms S-3 (333-121566) and on Forms S-8 (File Nos. 002-76164, 002-86785, 002-98115, 002-78394, 33-95608, 33-66824, 33-42010, 33-26472, 33-54422, 333-20657, 333-55911, 33-02254, 33-03958, 333-107543, 333-81986, 333-48595, 333-121861, 333-151006, 333-166730, 333-175840, and 333-224971). /s/ GRANT THORNTON LLP Seattle, Washington

EXHIBIT 31.1

Certification by Chief Executive Officer
Pursuant to 18 U.S.C. Section 1350
As Adopted Pursuant to
Section 302(a) of the Sarbanes-Oxley Act of 2002

I, Anthony Ambrose, certify that:

- 1) I have reviewed this annual report on Form 10-K of Data I/O Corporation;
- 2) Based upon my knowledge, this annual report does not contain any untrue statement of material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- 3) Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
- 4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f)0 for the registrant and we have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
 - Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and
 - d) Disclosed in this annual report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
- 5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

Date: March 26, 2021

/s/ Anthony Ambrose
Anthony Ambrose
Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

Certification by Chief Financial Officer
Pursuant to 18 U.S.C. Section 1350
As Adopted Pursuant to
Section 302(a) of the Sarbanes-Oxley Act of 2002

I, Joel S. Hatlen, certify that:

- 1) I have reviewed this annual report on Form 10-K of Data I/O Corporation;
- Based upon my knowledge, this annual report does not contain any untrue statement of material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
- 3) Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
- 4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f)0 for the registrant and we have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
 - Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purpose in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and
 - d) Disclosed in this annual report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
- 5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls over financial reporting.

Date: March 26, 2021

/s/ Joel S. Hatlen
Joel S. Hatlen
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

Certification by Chief Executive Officer
Pursuant to 18 U.S.C. Section 1350
As Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the annual report of Data I/O Corporation (the "Company") on Form 10-K for the period ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Anthony Ambrose, Chief Executive Officer of the Company, certify, that pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Anthony Ambrose
Anthony Ambrose
Chief Executive Officer
(Principal Executive Officer)

Date: March 26, 2021

Exhibit 32.2

(2)

Certification by Chief Financial Officer Pursuant to 18 U.S.C. Section 1350 As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the annual report of Data I/O Corporation (the "Company") on Form 10-K for the period ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joel S. Hatlen, Chief Financial Officer of the Company, certify, that pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or

15(d) of the Securities Exchange Act of 1934; and

The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the

Company.

/s/ Joel S. Hatlen
Joel S. Hatlen
Chief Financial Officer
(Principal Financial Officer)

Date: March 26, 2021

DATA I/O CORPORATION

NOTICE OF 2021

ANNUAL MEETING

and

PROXY STATEMENT

DATA I/O CORPORATION

April 5, 2021

To Our Shareholders:

You are cordially invited to attend the 2021 Annual Meeting of Data I/O Corporation, which will be held at Data I/O's headquarters at 6645 185th Ave NE, Suite 100, Redmond, Washington 98052. The meeting will begin at 10:00 a.m. Pacific Daylight Time on Thursday, May 20, 2021.

Officers of Data I/O will be attending and will respond to questions after the meeting. Formal business will include the election of directors, ratification of the continued appointment of Grant Thornton LLP as Data I/O's independent auditors, an advisory vote on executive compensation, and consideration of a proposal to amend and restate Data I/O's 2000 Stock Compensation Incentive Plan.

Please read the proxy materials carefully. Your vote is important. Data I/O appreciates you considering and acting on the proposals presented. The meeting is not being held as a virtual or hybrid meeting, so in order to attend and vote at the meeting (as opposed to voting by proxy), you must attend the meeting in person. However, due to ongoing concerns related to the spread of COVID-19, and in order to mitigate potential risks to the health and safety of our shareholders, employees, and other stakeholders, the Company encourages shareholders to vote on the matters before the meeting by proxy, and if you wish to listen to the annual meeting matters and voting results via conference call, we encourage you to use the conference call, rather than attend the meeting in person. There is no other business presentation planned for the meeting. The conference call information will be available on the Company's website at https://www.dataio.com/Company/Investor-Relations/Annual-Meeting or contact the corporate Secretary.

Sincerely,

/s/ Anthony Ambrose
Anthony Ambrose
President and Chief Executive Officer

DATA I/O CORPORATION

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS - May 20, 2021

To the Shareholders of Data I/O Corporation:

NOTICE IS HEREBY GIVEN that the Annual Meeting of Shareholders of Data I/O Corporation (the "Company" or "Data I/O") will be held at 10:00 a.m. Pacific Daylight Time, on Thursday, May 20, 2021, at Data I/O's principal offices, 6645 185th Ave NE, Suite 100, Redmond, Washington 98052, for the following purposes:

- (1) Election of Directors:
 - To elect four directors, each to serve until the next annual meeting of shareholders or until his or her successor is elected and qualified or until such director's earlier death, resignation, or removal.
- (2) Ratification of Independent Auditors:
 - To ratify the continued appointment of Grant Thornton LLP as Data I/O's independent auditors for the calendar year ended December 31, 2021.
- (3) Say on Pay Advisory Vote on Executive Compensation:
 - To consider and vote on an advisory resolution on the compensation of our named executive officers.
- (4) 2000 Stock Compensation Incentive Plan:
 - To consider and vote on a proposal to amend and restate the Data I/O Corporation 2000 Stock Compensation Incentive Plan (the "2000 Plan") and to increase the number of shares reserved for issuance under the 2000 Plan by an additional 700,000 shares of common stock.
- (5) Other Business:
 - To consider and vote upon such other business as may properly come before the meeting or any adjournments or postponements thereof.

Important Notice Regarding the Availability of Proxy Materials for the Shareholder Meeting To Be Held on May 20, 2021. The proxy statement and annual report to security holders are also available at http://www.dataio.com/company/investorrelations/annualmeeting.aspx.

The Board of Directors has fixed the close of business on March 22, 2021, as the Record Date for the determination of shareholders entitled to notice of, and to vote at, the 2021 Annual Meeting and any adjournment or postponement thereof.

By Order of the Board of Directors

/s/ Anthony Ambrose Anthony Ambrose President and Chief Executive Officer

Redmond, Washington April 5, 2021

YOUR VOTE IS IMPORTANT

Whether or not you expect to attend the meeting in person, we urge you to sign, date, and return the accompanying proxy card at your earliest convenience, or you may vote by the internet at http://www.investorvote.com/DAIO or by telephone at 1-800-652-8683, as provided in the instructions on the proxy card. This will ensure the presence of a quorum at the meeting. **Promptly returning a signed and dated proxy card, or voting by the internet or by telephone, will save Data I/O the extra expense of additional solicitation.** Your proxy is revocable at your request any time before it is voted. If you attend the meeting, you may vote in person if you wish, even if you have previously returned your proxy card. If you vote by mail, an addressed, postage-paid envelope is provided in order to make certain that your shares will be represented at the Annual Meeting.

DATA I/O CORPORATION 6645 185th Ave NE, Suite 100 Redmond, Washington 98052

PROXY STATEMENT

ANNUAL MEETING OF SHAREHOLDERS

May, 20, 2021

INFORMATION REGARDING PROXY

This Proxy Statement and the accompanying form of proxy are furnished in connection with the solicitation of proxies by the Board of Directors ("Board of Directors") of Data I/O Corporation (the "Company" or "Data I/O") for use at the Annual Meeting of Shareholders to be held on Thursday, May 20, 2021, at 10:00 a.m. Pacific Daylight Time at Data I/O's principal office, 6645 185th Ave NE, Suite 100, Redmond, Washington 98052, and at any adjournment of the meeting (the "Annual Meeting"). Shareholders of record at the close of business on March 22, 2021, (the "Record Date") are entitled to notice of, and to vote at, the Annual Meeting. This Proxy Statement and a copy of Data I/O's 2020 Annual Report to Shareholders are being mailed to shareholders on or about April 9, 2021.

A proxy card is enclosed for your use. You are requested on behalf of the Board of Directors to sign, date, and return the proxy card in the accompanying envelope, which is postage-paid if mailed in the United States or Canada, or you may vote by the internet at http://www.envisionreports.com/DAIO, or by telephone at 1-800-652-8683, as provided in the instructions on the proxy card. If you vote by the internet or by telephone, you do not need to mail back the proxy card.

A proxy in the accompanying form, which is properly signed, dated and returned and not revoked, will be voted in accordance with its instructions. To vote on the election of directors, check the appropriate box under Proposal 1 on your proxy card. You may (a) vote "FOR" all of the director nominees as a group, (b) "WITHHOLD" authority to vote for all director nominees as a group, or (c) vote "FOR" all director nominees as a group except those nominees indicated to the contrary. To vote on Proposal 2 to ratify the continued appointment of Grant Thornton LLP as Data I/O's independent auditors for the calendar year ended December 31, 2021, check the appropriate box under Proposal 2 on your proxy card. You may (a) vote "FOR" approval of the ratification of Grant Thornton LLP as Data I/O's independent auditors, (b) vote "AGAINST" approval of the ratification of Grant Thornton LLP as Data I/O's independent auditors. To vote on Proposal 3, Say on Pay – Advisory Vote on Executive Compensation, you may vote (a) "FOR" the advisory resolution, (b) "AGAINST" the advisory resolution, or (c) "ABSTAIN" from voting on the advisory resolution on executive compensation. To vote on Proposal 4, to amend and restate the Data I/O Corporation 2000 Stock Compensation Incentive Plan (the "2000 Plan") to increase the number of shares reserved for issuance under the 2000 Plan by an additional 700,000 shares of common stock, check the appropriate box under Proposal 4 on your proxy card. You may (a) vote "FOR" approval of the amendment to the 2000 Plan, (b) vote "AGAINST" approval of the amendment to the 2000 Plan, or (c) "ABSTAIN" from voting on the approval of the amendment to the 2000 Plan.

Proxies which are returned to Data I/O without instructions will be voted as recommended by the Board of Directors. Any shareholder who returns a proxy may revoke it at any time prior to voting on any matter (without, however, affecting any vote taken prior to such revocation) by (i) delivering written notice of revocation to the Secretary of Data I/O at Data I/O's principal offices, (ii) executing and delivering to Data I/O another proxy dated as of a later date, or (iii) voting in person at the Annual Meeting.

VOTING SECURITIES AND PRINCIPAL HOLDERS

The only outstanding voting securities of Data I/O are shares of common stock (the "Common Stock"). As of the Record Date, there were 8,421,599 shares of Common Stock issued and outstanding, and each such share is entitled to one vote at the Annual Meeting. The presence in person or by proxy of holders of record of a majority of the outstanding shares of Common Stock is required for a quorum for transacting business at the Annual Meeting. Shares of Common Stock underlying abstentions will be considered present at the Annual Meeting for the purpose of calculating a quorum. Under Washington law and Data I/O's charter documents, if a quorum is present, the four nominees for election to the Board of Directors who receive the greatest number of affirmative votes cast at the

Annual Meeting will be elected directors. Abstentions and broker non-votes will have no effect on the election of directors because they are not cast in favor of any particular candidate.

The proposal to ratify the continued appointment of Grant Thornton as Data I/O's independent auditors and approve the amendment and restatement of the 2000 Plan will be approved, if a quorum is present, if the number of votes cast in favor of the proposal exceeds the number of votes cast against the proposals. Abstentions and broker non-votes on the proposals will have no effect because approval of the proposal is based solely on the votes cast.

Say on Pay – The advisory vote on the compensation of Data I/O's named executive officers will be approved, if a quorum is present, if the number of votes cast in favor of the advisory resolution exceeds the number of votes cast against the advisory resolution. Abstentions and broker non-votes on the advisory resolution will have no effect because approval of the advisory resolution is based solely on the votes cast.

Proxies and ballots will be received and tabulated by Computershare, an independent business entity not affiliated with Data I/O.

Effect of Not Casting Your Vote

If you hold your shares in street name, it is critical that you instruct your broker or bank how to vote if you want it to count in Proposal 1, the election of directors; Proposal 3, Say on Pay; and Proposal 4, Amendment and Restatement of the 2000 Plan. Regulations no longer allow your bank or broker to vote your uninstructed shares in the election of directors on a discretionary basis. If you hold your shares in street name and you do not instruct your bank or broker how to vote in the Proposal 1, election of directors; Proposal 3, Say on Pay; and Proposal 4, Amendment and Restatement of the 2000 Plan, votes will not be cast on your behalf for these Proposals. Your bank or broker will, however, continue to have discretion to vote any uninstructed shares on Proposal 2, ratification of the appointment of Data I/O's independent auditors. If you are a shareholder of record and you do not cast your vote, votes will not be cast on your behalf on any of the items of business at the Annual Meeting.

The Common Stock is traded on The NASDAQ Capital Market under the symbol "DAIO". The last sale price for the Common Stock, as reported by The NASDAQ Capital Market on March 22, 2021, was \$5.37 per share.

Principal Holders of Data I/O's Common Stock

The following table sets forth information for all shareholders known by Data I/O to be the beneficial owners of more than five percent of its outstanding Common Stock as of March 22, 2021. Except as noted below, each person or entity has sole voting and investment powers with for the shares shown.

Name and Address	Amount and Nature of Beneficial Ownership	<u>!</u>	Percent of Shares Outstanding
Renaissance Technologies LLC Renaissance Technologies Holding Corporation 800 Third Avenue New York, NY 10022	701,443	(1)	8.33%

The holding reported as of December 31, 2020, as jointly reported by Renaissance Technologies LLC ("RTC") and Renaissance Technologies Holding Corporation ("RTHC") on the most recent (filed February 11, 2021) Schedule 13G filed under the Securities Exchange Act of 1934. The Schedule 13G indicates that RTC has sole voting power for 679,542 shares and dispositive power for 701,443 shares. The Schedule 13G further indicates that RTHC has sole voting power for 679,542 shares and dispositive power for 701,443 shares, comprising the shares beneficially owned by RTHC, because of RTHC's majority ownership of RTC.

Directors' and Officers' Share Ownership

The following table indicates ownership of Data I/O's Common Stock by each director of Data I/O, each executive officer named in the compensation tables appearing later in this Proxy Statement, and by all directors and executive officers as a group, all as of March 22, 2021. Data I/O is not aware of any family relationships between any director, director nominee or executive officer of Data I/O.

<u>Name</u>	Amount and Nature of Beneficial Ownership	Percent of Shares Outstanding
Anthony Ambrose	332,432	3.9%
Joel S. Hatlen	163,023	1.9%
Rajeev Gulati	90,964	1.1%
Michael Tidwell (2)	49,074	(1)
Douglas W. Brown	69,833	(1)
Alan B. Howe	65,832	(1)
Mark J. Gallenberger	60,209	(1)
Sally A. Washlow	7,751	(1)
All current directors and executive officers as a group (8 persons) ⁽²⁾	839,118	10.0%

⁽¹⁾ Less than 1 percent each.

Data I/O is not aware of any arrangement the operation of which may at a subsequent date result in a change of control of Data I/O.

⁽²⁾ Includes 12,500 options exercisable within 60 days.

CORPORATE GOVERNANCE

Board Charters

The Board of Directors has adopted Corporate Governance and Nominating Committee, Audit Committee and Compensation Committee Charters. All our Charters are reviewed and updated periodically by our Board of Directors. All of our Charters were reviewed during 2020 and again in early 2021 and no changes were made. The current versions of our Charters are posted on the corporate governance page of our website at https://www.dataio.com/Company/Investor-Relations/Corporate-Governance.aspx. All of these Charters are consistent with the applicable requirements of United States security laws and our NASDAQ listing standards.

Code of Ethics

Our Code of Ethics was reviewed by our Board of Directors during 2020 and again in early 2021 and no changes were made. The current version of our Code of Ethics is posted on the Corporate Governance page of our website at https://www.dataio.com/Company/Investor-Relations/Corporate-Governance.aspx. Data I/O's Code of Ethics apply to all directors, officers and employees of Data I/O, including the named executive officers. The key principles of the Code are to act legally, and with integrity in all work for Data I/O. We will post any amendments to our Code of Ethics on the corporate governance page of our website at www.dataio.com/company/investorrelations/corporategovernance.aspx. In the unlikely event that the Board of Directors approves any waiver to the Code of Ethics for our executive officers or directors, information concerning such waiver will also be posted on our website. In addition to posting information regarding amendments and waivers on our website, the same information will be included in a Current Report on Form 8-K within four business days following the date of the amendment or waiver, unless website posting of such amendments or waivers is permitted by the rules of The NASDAQ Stock Market LLC.

Risk Oversight

Our current Board of Directors consists of four independent directors, and one non-independent director, our Chief Executive Officer. Risk oversight is generally handled by our entire Board of Directors, although certain risk oversight areas such as internal control and cyber risk are handled by our Audit Committee, and compensation is handled by our Compensation Committee, respectively. The Board leadership structure promotes effective oversight of the Company's risk management for the same reasons that the structure is most effective for the Company in general, that is, by providing the Chief Executive Officer and other members of senior management with the responsibility to assess and manage the Company's day-to-day risk exposure and providing the Board, and specifically the Audit Committee of the Board, with the responsibility to oversee these efforts of senior management.

Director Independence

Messrs. Gallenberger, Howe and Brown and Ms. Washlow are independent directors as defined by applicable U.S. Securities and Exchange Commission ("SEC") rules and NASDAQ listing standards. Mr. Delafield was also independent, but was no longer a director as of October 27, 2020. Mr. Ambrose, our Chief Executive Officer, is not an independent director.

Leadership Structure

Our Chairman, Mr. Howe, is an independent director (but will not be standing for re-election so a new independent Board Chair will be appointed) and Mr. Ambrose is our Chief Executive Officer, President, and Director.

PROPOSAL 1: ELECTION OF DIRECTORS

At the 2020 Annual Meeting, the shareholders elected five directors to serve until the next Annual Meeting or until such director's successor has been qualified and elected or such director's earlier death, resignation or removal. For the 2021 Annual Meeting, the Board of Directors has approved the four nominees named below. Four nominees are currently members of the Board of Directors. Each of the nominees has indicated that they are willing and able to serve as directors. However, should one or more of the nominees not accept the nomination, or otherwise be unwilling or unable to serve, it is intended that the proxies will be voted for the election of a substitute nominee or nominees designated by the Board of Directors.

RECOMMENDATION: The Board of Directors recommends a vote FOR each of the director nominees.

Anthony Ambrose, age 59, was appointed a director of Data I/O effective October 25, 2012. He joined Data I/O October 25, 2012 and has served as President and Chief Executive Officer ("CEO"). Prior to Data I/O, Mr. Ambrose was Owner and Principal of Cedar Mill Partners, LLC, a strategy consulting firm since 2011. From 2007 to 2011, he was Vice President and General Manager at RadiSys Corporation, a leading provider of embedded wireless infrastructure solutions, where he led all product divisions and worldwide engineering. Until 2007, he was general manager and held several other progressively responsible positions at Intel Corporation, where he led development and marketing of standards-based telecommunications platforms, and grew the industry standard server business to over \$1B in revenues. He is Chair of the EvergreenHealth Foundation Board of Trustees. In 2019 he also became a board member of CipherLoc Corporation (OTCQB: CLOK). Mr. Ambrose has a Bachelor's of Science in Engineering from Princeton University, and completed the Stanford Graduate School of Business Director Symposium.

Mr. Ambrose has extensive semiconductor, systems and networking industry operating experience. He has significant executive experience in strategy development, business management, marketing, engineering, and new product development. His role as our President and CEO gives him knowledge as well as unique insight into our challenges, opportunities and operations that the Board of Directors believes qualifies him to serve as a director of Data I/O.

Douglas W. Brown, age 65, was appointed a director of Data I/O effective April 1, 2011. Mr. Brown retired in 2019 from Executive Chairman of All Star Directories, Inc., Seattle, Washington, a Web-based publisher of post-secondary online and career school directories which he joined as President in 2005 and served in that capacity until 2016. From 2003 to 2005, he provided governance and interim executive services, with engagements including Interim President and Board member, to venture-backed clients. From 1998 to 2003, he was a Board member of GoAhead Software and was appointed its President in 2001. From 1993 to 1999, he was a President of a Seattle-area manufacturing company which became a Division of Leggett & Platt in 1996. Prior to that time, he was the Chief Financial Officer ("CFO") of Seattle Silicon, and Executive Vice President, Finance and Operations at Phamis. He started his career as a Certified Public Accountant at Arthur Young & Co, now Ernst & Young, in Seattle. Mr. Brown has a Bachelor's degree in Business from University of Idaho.

Mr. Brown has extensive software, financial, CEO, CFO, and board level experience that the Board of Directors believes qualifies him to serve as a director of Data I/O.

Mark J. Gallenberger, age 57, was appointed a director of Data I/O effective January 31, 2013. He is currently the Executive Vice President, Chief Financial Officer of Cerence, Inc. (NASDAQ: CRNC), a global industry leader in providing voice A.I. solutions that create unique, moving experiences for the automotive world. He was hired in July 2019 by Nuance Communications, Inc. (NASDAQ: NUAN), to be the Chief Financial Officer of the automotive spin-out (Cerence, Inc.) from Nuance effective October 1, 2019. Previously, he was the Senior Vice President, Chief Financial Officer, Chief Operating Officer and Treasurer of Xcerra Corporation (formerly called LTX-Credence Corporation) (NASDAQ: XCRA), a global provider of test and handling capital equipment, interface products, test fixtures, and services to the semiconductor, industrial, and electronics manufacturing industries, which he joined in 2000. For the six years prior, he was Vice President/Senior Manager with Ernst &Young (Cap Gemini) in their consulting practice, establishing the Deals & Acquisitions Group. Previously, he held management and technical positions with Digital Equipment Corporation. He has a Master's of Business Administration from Northwestern University's Kellogg Graduate School of Management and a Bachelor's of Science – Electrical Engineering from Rochester Institute of Technology.

Mr. Gallenberger has extensive semiconductor equipment industry, automotive industry, mergers & acquisition, capital markets, engineering, financial, operations, and CFO experience that the Board of Directors believes qualifies him to serve as a director of Data I/O.

Sally A. Washlow, age 49, was appointed a director of Data I/O effective October 28, 2020. She currently leads the Midwest practice for LHH's International Center for Executive Options, a boutique provider of executive transition consulting services since 2019. She operated SW Consulting LLC supporting companies with executive management, strategy initiatives and board service since 2017. She is also a member of the Consumer Technology Association and serves on various committees as well as the Board of Industry Leaders. From 2015 to 2017, Ms. Washlow was the Chief Executive Officer of Cedar Electronics Corporation, a supplier of radar detectors, GPS systems, dash cameras and other electronic products, and led the integration of the Cobra and Escort electronics businesses. Prior to that, Ms. Washlow worked for 13 years at Cobra Electronics Corporation (COBR) in various capacities, including as President from 2013 until 2015. Prior roles held were with Motorola in the automotive and telecommunication sectors along with LG/ Zenith and the launch of Digital Television. Ms. Washlow received a MBA in Marketing from DePaul University and a BA in Supply Chain Management from Michigan State University. In 2019, she became a board member of Costar Technologies, Inc. (OTC Markets Group: CSTI).

Ms. Washlow as a consultant, and former Chief Executive Officer for Cedar Electronics Corporation, has extensive experience as an operating leader in the security and automotive electronics markets that the Board of Directors believes qualifies her to serve as a director of Data I/O.

THE BOARD OF DIRECTORS

Communications with the Board of Directors

Shareholders may communicate with the Board of Directors by sending an email or by sending a letter to Data I/O Corporation Board of Directors, c/o the Secretary, 6645 185th Ave NE, Suite 100, Redmond, WA 98052. The Secretary will receive the correspondence and forward it to the Chairman of the applicable Board of Directors Committee or to any individual director or directors to whom the communication is directed.

BOARD COMMITTEES

During the year ended December 31, 2020, there were nine meetings of the Board of Directors. Each of the incumbent directors who was on the Board of Directors during 2020 attended at least 75% of the aggregate of the total number of meetings of the Board of Directors and the total number of meetings held by all committees of the Board of Directors on which they served during his term of service on the Board of Directors. Data I/O does not have a policy requiring members of the Board of Directors to attend the Annual Meeting, although we typically encourage our Board of Directors to attend. Due to COVID-19 Mr. Brown, Mr. Howe, Mr. Gallenberger, and Mr. Delafield attended our 2020 Annual Meeting via Zoom and Mr. Ambrose attended in person.

The Board of Directors had three standing Committees during 2020: the Audit Committee, the Compensation Committee and the Corporate Governance and Nominating Committee. Each committee was comprised solely of independent directors during 2020, as defined by applicable SEC rules, NASDAQ listing standards including director independence generally as well as additional independence requirements for audit and compensation committees, and the Sarbanes-Oxley Act of 2002. The following table shows the composition of the Board Committees and Board Leadership structure during 2020 and through the date of this Proxy Statement.

			Corporate Governance	
Director		Compensation	and	
M=member	Audit Committee	Committee	Nominating Committee	Comments
Anthony Ambrose				President & CEO
Doug Brown	M	M	Chair	
Alan Howe	M		M	Chair of the Board until May
				20, 2021. No longer a
				director effective May 20,
				2021
Mark Gallenberger	Chair	M	M	
JD Delafield		Chair (until	M (until	No longer a director
		10/27/2020)	10/27/2020)	effective October 27, 2020
Sally Washlow		Chair (start	M (start	A director effective October
		10/28/2020)	10/28/2020)	28, 2020

Audit Committee

The Audit Committee appoints, oversees, evaluates, and engages independent certified public accountants for the ensuing year and approves the compensation and other terms of such engagement; reviews the scope of the audit; periodically reviews Data I/O's program of internal control and audit functions; receives and reviews the reports of the independent accountants; and reviews the annual financial report to the directors and shareholders of Data I/O. Each member of the Audit Committee is an independent director, as defined by applicable NASDAQ listing standards and the Sarbanes-Oxley Act of 2002. During 2020 and through the date of this Proxy statement, all Audit Committee members are "audit committee financial experts" as defined by the applicable SEC rules adopted pursuant to the Sarbanes-Oxley Act of 2002. The Audit Committee met five times during 2020 and recorded 100% committee attendance at such meetings. See the "Report of the Audit Committee" for additional information.

Corporate Governance and Nominating Committee

The Corporate Governance and Nominating Committee, or "CGNC", develops, recommends to the Board of Directors, and monitors a set of corporate governance principles applicable to Data I/O. The CGNC seeks qualified candidates to serve on the Board of Directors, recommends them for the Board of Directors' consideration for election as directors at the Annual Meeting of Shareholders and proposes candidates to fill vacancies on the Board of Directors. The CGNC met five times in 2020 and recorded at least 75% committee attendance at such meetings held during their term of service. The CGNC continues to seek qualified candidates and recommends the director nominees to the Board of Directors. The CGNC identifies, evaluates, and recommends director nominees and Committee assignments which are described in greater detail below.

Compensation Committee

The Compensation Committee is composed entirely of independent directors, as defined by applicable NASDAQ listing standards for compensation committees. The Compensation Committee is responsible for setting and administering the policies which govern all of the compensation programs of Data I/O. The Compensation Committee may delegate its authority and duties to subcommittees or individual members of the Compensation Committee as it considers appropriate.

The Compensation Committee makes recommendations to the Board of Directors concerning the compensation of Data I/O's executive officers. The Compensation Committee administers Data I/O's long-term equity incentive plans. The Compensation Committee reviews all employee benefit programs and approves significant changes in major programs and all new programs. The Compensation Committee met three times during 2020 and recorded 100% committee attendance at such meetings.

As authorized by the Compensation Committee charter, the Compensation Committee may retain consultants or other advisors, as well as purchase compensation surveys, to assist in carrying out its responsibilities.

Consideration of Director Nominees

The Corporate Governance and Nominating Committee has developed, and the Board has approved, Board Responsibilities and Director Recruitment Objectives, which further outline our directors' roles and responsibilities and desired traits, diversity, characteristics, experience and criteria for selection. The Corporate Governance and Nominating Committee, or the independent members of the Board of Directors, as applicable, in evaluating and determining whether to recommend a person as a candidate for election as a director consider, in light of the Board Responsibilities and Director Recruitment Objectives, the relevant management and/or technology industry experience of potential director candidates (such as experience as chief executive, operations or financial officer, or similar positions); business development, mergers and acquisitions experience, public/corporate board experience, diversity, knowledge of Data I/O; educational experience; commitment to maximizing shareholder value; certain values such as integrity, accountability, judgment and adherence to high performance standards; independence pursuant to applicable guidelines; ability and willingness to undertake the required time commitment to Board functions; shareholder input; and an absence of conflicts of interest with Data I/O.

Director Diversity

The Corporate Governance and Nominating Committee also considers issues of diversity, such as diversity of gender, race and national origin, education, professional experience and differences in viewpoints and skills. The CGNC does not have a formal policy on Board diversity; however, the CGNC believes that it is important for Board members to represent diverse viewpoints, and comply with specific applicable laws. Washington State has legislated, and NASDAQ has proposed, formal director diversity requirements, which will become requirements starting as early as 2022, but currently are not imposed due to exemptions or proposed status. Data I/O believes it is already in compliance with these requirements for the coming year. For gender reasons, Sally Washlow is a diverse director. Composition and quantity of board members will be potentially impacted as we maintain compliance with these and future requirements. In considering candidates for the Board, the CGNC considers the entirety of each candidate's credentials in the context of these standards. With respect to evaluating the nomination of continuing directors for re-election, the CGNC considered each director's contributions to the company as well as the results of the Board of Directors self-evaluations process.

Identifying Director Nominees; Consideration of Nominees of the Shareholders

The Corporate Governance and Nominating Committee may employ a variety of methods for identifying and evaluating nominees for director. The CGNC regularly assesses the size of the Board, the need for particular expertise on the Board, and whether any vacancies

on the Board are expected due to retirement or otherwise. In the event that vacancies are anticipated, or otherwise arise, the CGNC considers various potential candidates for director which may come to the CGNC's attention through current Board members, professional search firms, shareholders, or other persons and evaluates these candidates in light of the Board Responsibilities and Director Recruitment Objectives. These candidates are evaluated at regular or special meetings of the CGNC, and may be considered at any point during the year.

The Corporate Governance and Nominating Committee will consider candidates recommended by shareholders, when the nominations are properly submitted, under the criteria summarized above in "Consideration of Director Nominees" and in accordance with the procedures described below in "Shareholder Nominations and Proposals for the 2021 Annual Meeting of Shareholders." Following verification of the shareholder status of persons proposing candidates, the CGNC makes an initial analysis of the qualifications of any candidate recommended by shareholders or others pursuant to the criteria summarized above to determine if the candidate is qualified for service on the Data I/O Board of Directors before deciding to undertake a complete evaluation of the candidate. If any materials are provided by a shareholder or professional search firm in connection with the nomination of a director candidate, such materials are forwarded to the CGNC as part of its review. Other than the verification of compliance with procedures and shareholder status, and the initial analysis performed by the CGNC, a potential candidate nominated by a shareholder is treated like any other potential candidate during the review process by the CGNC. For eligible shareholder nominees to be placed on the ballot for the 2021 Annual Meeting of Shareholders, shareholders were required to deliver nominations for proposed director nominees to Data I/O by February 17, 2021. While no formal candidate nominations were made by shareholders for election at the 2021 Annual Meeting, Ms. Washlow was initially identified and introduced by a Board member; Mr. Howe and Mr. Gallenberger were initially identified by discussions with significant shareholders and the Board and Mr. Brown was initially identified and introduced by a member of management.

Certain Relationships and Related Transactions

Our Audit Committee is charged with monitoring and reviewing issues involving potential conflicts of interest, and reviewing and approving related party transactions as set forth in the Code of Ethics, which is posted on the corporate governance page of our website at https://www.dataio.com/Company/Investor-Relations/Corporate-Governance.aspx. Under our Code of Ethics, our directors, officers and employees are expected to avoid conflicts of interest with Data I/O and are required to report any such conflicts of interest to our Chief Executive Officer or Chief Financial Officer, or to the Chair of our Audit Committee. Our Audit Committee reviews all such transactions and relationships by our directors and executive officers that come to its attention either through the director and officer questionnaires or otherwise, and considers whether to approve or take other appropriate action with respect to such transactions or relationships. During 2019 and 2020, no related party transactions that were significant or material occurred.

BOARD COMPENSATION

Employee directors (Anthony Ambrose) do not receive additional compensation for serving on the Board of Directors. During 2020, non-employee directors were scheduled to receive a quarterly cash retainer of \$7,750 and additional quarterly compensation to Directors for service as Chair of the Board of Directors or as a Committee chair: \$3,750 for Chair of the Board of Directors; \$2,500 for Chair of the Audit Committee; \$2,000 for Chair of the Compensation Committee; and \$2,000 for Chair of the Corporate Governance and Nominating Committee. Cash compensation for the 1st and 4th quarter of 2020 was paid as scheduled. As part of measures taken at the start of COVID-19 pandemic to preserve cash and reduce expenses, for the 2nd and 3rd quarter of 2020 the Board approved reducing the retainer and additional Chair amounts by 20%, as well as deferral of the remainder until the end of the 3rd quarter 2020, when it was paid in stock under the Director Fee Plan effective September 30, 2020. Fees are prorated based on time served for changes in directors and assignments.

In addition, each non-employee Board of Directors member as of May 18, 2020, was granted a restricted stock award for 18,600 shares of Data I/O stock. A new Director, Sally Washlow, was given a prorated share grant upon appointment. The restricted stock awards were granted under the provisions and terms of the Amended and Restated 2000 Stock Compensation Incentive Plan ("2000 Plan") and generally vest in one year or on the date of the next Annual Meeting, if earlier. Data I/O also reimburses non-employee directors for actual travel and out-of-pocket expenses incurred in connection with service to Data I/O.

Each Data I/O non-employee member of the Board of Directors is required to achieve ownership of Data I/O stock at least equal to three times the annual director cash retainer fee based on Data I/O's then current share price. Non-employee directors have five years from their initial election or appointment to meet the ownership target requirement. Amounts that count toward meeting the target requirement include: shares owned; shared ownership (shares owned or held in trust by immediate family); and the gain amount from any in-the-money vested options. If the stock ownership target requirement has not been met by any non-employee director, until such time as such director reaches the target requirement, he or she will be required to retain any Data I/O shares

issued by Data I/O to such director (other than those disposed of to pay for the exercise and associated taxes on those shares). As of the Record Date, Messrs. Howe, Brown and Gallenberger have met the stock ownership target requirement and Ms. Washlow, as a result of her recent appointment, has not yet met the requirement.

The Chief Executive Officer ("CEO") is required to achieve ownership of Data I/O stock of at least two times the base pay of the CEO based on Data I/O's then current share price. The CEO has five years from appointment to meet the ownership target requirement. Amounts that count toward meeting the target requirement are the same as for the Board of Directors. If the stock ownership target requirement has not been met by the CEO, until such time as the CEO reaches the requirement amount, he or she will be required to retain any Data I/O shares issued by Data I/O (other than those disposed of to pay for the exercise and associated taxes on those shares). As of the Record Date the CEO has met the stock ownership target requirement.

Data I/O has a Securities Trading Policy that includes a prohibition against hedging transactions.

DIRECTOR COMPENSATION

The following table shows compensation paid by Data I/O to non-employee directors during 2020.

	Fees				Nonqualified		
	Earned or			Non-Equity	Deferred		
	Paid in	Stock	Option	Incentive Plan	Compensation	All Other	
	Cash ⁽³⁾	Awards	Awards	Compensation	Earnings	Compensation	Total
Name	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Douglas W. Brown (1)(2)	\$ 35,100	\$ 55,986	\$0	\$0	\$0	\$0	\$91,086
Sally A. Washlow (1)(2)(3)	\$ 6,889	\$ 27,671	\$0	\$0	\$0	\$0	\$34,560
Alan B. Howe (1)(2)(4)	\$ 41,400	\$ 55,986	\$0	\$0	\$0	\$0	\$97,386
Mark J. Gallenberger (1)(2)	\$ 36,900	\$ 55,986	\$0	\$0	\$0	\$0	\$92,886
John D. Delafield (1)(2)(3)	\$ 25,350	\$ 55,986	\$0	\$0	\$0	\$0	\$81,336

⁽¹⁾ Each outside director elected at the annual meeting in 2020 was awarded 18,600 shares of restricted stock with a fair value of \$3.01 on May 18, 2020, vesting in one year or the next annual meeting, if earlier. Ms. Washlow received a prorated grant under the same provisions on the date of her appointment on October 28, 2020. Mr. Delafield's grant was forfeited as it had not vested at the time he resigned on October 27, 2020.

SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires Data I/O's directors, certain officers and persons who own more than ten percent (10%) of Data I/O's Common Stock ("Reporting Persons") to file with the SEC initial reports of ownership and reports of changes in ownership of Common Stock and other equity securities of Data I/O. Reporting Persons are required by SEC regulations to furnish Data I/O with copies of all Section 16(a) reports.

Delinquent Section 16(a) Reports

A new Director, Sally Washlow, as a result of delays in reactivating her EDGAR filing codes, filed two forms late that included 1 transaction. Both Form 3, reporting no holdings, and Form 4, reporting an initial equity grant event on October 28, 2020, were filed 3 days late.

⁽²⁾ No outside director had option awards outstanding at December 31, 2020.

Retainer fees and Chair fees were paid as scheduled in cash for Q1 and Q4 2020. For Q2 and Q3 the Board approved reducing the retainer and additional Chair amounts by 20% and deferring the remainder until the end of the 3rd quarter of 2020, when it was paid in stock under the Director Fee Plan. Fees are prorated for Director changes during a quarter.

⁽⁴⁾ Alan Howe will resign as a Director and not seek re-election at the Annual Meeting on May 20, 2021.

REPORT OF THE AUDIT COMMITTEE

The Audit Committee oversees Data I/O's financial reporting process on behalf of the Board of Directors. Management has the primary responsibility for the consolidated financial statements and the reporting process, including the systems of internal controls. Audit Committee members are not professional accountants or auditors and their functions are not intended to duplicate or to certify the activities of management or the independent auditors. In fulfilling its oversight responsibilities, the Committee reviewed the audited consolidated financial statements in the Annual Report (Form 10-K) with management, including a discussion of the quality, not just the acceptability, of the accounting principles, the reasonableness of significant judgments, and the clarity of disclosures in the financial statements.

The Committee reviewed with the independent auditors, who are responsible for expressing an opinion on the conformity of those audited consolidated financial statements with generally accepted accounting principles in the United States, their judgments as to the quality, not just the acceptability, of Data I/O's accounting principles and such other matters as are required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board ("PCAOB") and the Commission, with the Committee under generally accepted auditing standards. In addition, the Committee has discussed with the independent auditors the auditors' independence from management and Data I/O including the matters in the written disclosures and the letter provided by the independent auditors, as required by the applicable requirements of the Public Company Oversight Board and the SEC for independent auditor communications with Audit Committees concerning independence, and considered the compatibility of non-audit services with the auditors' independence.

The Committee selects and engages Data I/O's independent auditors, is involved in selecting and approving the independent auditors' lead audit partner, and discusses the overall scope and plans for the audits. The Committee meets with the independent auditors, with and without management present, to discuss the results of their examinations, their evaluations of Data I/O's internal controls, and the overall quality of Data I/O's financial reporting. The Committee held five meetings during 2020, of which five were attended by Data I/O's independent auditors.

In reliance on the reviews and discussions referred to above, the Committee recommended to the Board of Directors (and the Board has approved) that the audited consolidated financial statements be included in Data I/O's Annual Report (Form 10-K) for the year ended December 31, 2020, for filing with the Securities and Exchange Commission. The Committee has considered the Shareholder vote of approval of 99% in May 2020, as well as the impact of changing independent auditors and has selected Grant Thornton LLP as Data I/O's auditors for the current year.

Respectfully submitted,

AUDIT COMMITTEE

Mark Gallenberger (Chair) Douglas W. Brown Alan B. Howe

April 5, 2021

PRINCIPAL ACCOUNTANT'S FEES AND SERVICES

Audit Fees: Aggregate fees billed by Grant Thornton LLP for professional services rendered for the audit of Data I/O's financial statements for each of the years ended December 31, 2020, and 2019 and for review of the financial statements included in each of Data I/O's quarterly reports on Form 10-Q during each of the years ended December 31, 2020, and 2019, were approximately \$210,058 and \$204,808, respectively.

Audit Related Fees: No aggregate fees were billed for the years ended December 31, 2020, and 2019 for assurance and subsidiary related services by Grant Thornton LLP that are reasonably related to the performance of the audit or review of Data I/O's financial statements that are not reported under the caption "Audit Fees" above, including accounting treatment consultations.

Tax Fees: No aggregate fees were billed for the years ended December 31, 2020, and 2019 for professional tax services rendered by Grant Thornton LLP.

All Other Fees: No aggregate fees were billed for the years ended December 31, 2020, and 2019, for all other products and services provided by Grant Thornton LLP that are not otherwise disclosed above.

Policy on Pre-Approval by Audit Committee of Services Performed by Independent Auditors

The Audit Committee's policy is to pre-approve all audit and permissible non-audit services provided by the independent auditors. These services may include audit services, non-audit services, tax services and other services. Pre-approval is detailed as to the particular service or category of service and is subject to a specific engagement authorization.

During the year, circumstances may arise when it may become necessary to engage the independent auditors for additional services not contemplated in the original pre-approval. In those circumstances, the Audit Committee has delegated pre-approval authority to the Chair of the Audit Committee for those instances when pre-approval is needed prior to a scheduled Audit Committee meeting. These additional approvals should be reported at the next scheduled Audit Committee meeting.

For 2020, all services provided by the independent auditors were pre-approved.

EXECUTIVE COMPENSATION

Shareholder Vote

At our 2020 Annual Meeting of Shareholders, our shareholders approved, in an advisory vote, the compensation of our Named Executive Officers, as disclosed in the Executive Compensation discussion and analysis, the compensation tables and the related disclosures in our Proxy Statement. The proposal was approved by our shareholders with 91 percent of the votes cast voting "for" approval and 5 percent voting "against" approval. In light of the level of approval by our stockholders, the Compensation Committee considered the result of the vote and did not make changes to our compensation policies or practices specifically in response to the stockholder vote.

COVID-19

As part of measures taken at the start of the COVID-19 pandemic to preserve cash and reduce expense, executive officer base salary was reduced for the second and third quarter of 2020 and resumed to the previous level for the fourth quarter. No other base salary increases took place in 2020. In addition, no adjustments to incentive plans or measures were made for the impact of COVID-19 on the business. The incentive plan measures had no amounts earned in 2020 due to the thresholds for financial performance not being met.

Elements of Our Company's Compensation Plan

Annual executive officer compensation consists of the following elements which are described in more detail below:

- Annual base salary;
- Management Incentive Compensation Plan or "MICP";
- Long-term equity incentives;
- Benefits;
- Perquisites and other perceived benefits; and
- Individual Executive Officers' Performance.

It is the Compensation Committee's policy to set total executive officer compensation at competitive levels based on compensation surveys with similar positions in similar sized company revenue ranges and at levels sufficient to attract and retain a strong, motivated leadership team. Our philosophy for compensation of executive officers is based on the following two principles:

- **i.** Executive base compensation levels should be established by comparison of job responsibility to similar positions in comparable companies and be adequate to retain highly-qualified personnel; and
- **ii.** Variable compensation should be a critical element of compensation and be set to be comparably competitive and to provide strong incentives to improve performance and shareholder value.

- Annual Base Salary. The Compensation Committee establishes a base salary structure for each executive officer position. This structure defines the salary levels and the relationship of base salary to total cash compensation. The Compensation Committee reviews the salary structure periodically.
- MICP. The MICP offers each executive officer a performance-based opportunity to earn the variable component of annual cash compensation in an amount tied to a percentage of the executive officer's base salary. The Compensation Committee's philosophy in setting executive MICP percentages and the formulas for MICP payout is to pay above average total compensation for better than average historical or expected financial performance and below average compensation for lower than or average historical or expected financial performance. The percentages of base salary targeted for MICP payout ("the MICP Target") for specific executive officers for a given year are generally the same as the previous year, but can be changed by the Compensation Committee on an annual basis. The MICP payout can range from 0% to 200% of each executive's MICP Target based upon the actual achieved MICP Measures for the period. The 2019 and 2020 MICP Target percentages for our executive officers were as follows:

			Estimated Payout at
	Executive's	Executive's	Maximum
	MICP	MICP	Measure
	2019 Target	2020 Target	for 2021
Ambrose	70%	70%	140%
Gulati	50%	50%	100%
Hatlen	50%	50%	100%
Tidwell	50%	50%	100%

The Compensation Committee determined for 2019 and again for 2020 that it was critical to emphasize profitability. For 2019 the Compensation Committee established a single measure: Financial Performance ("FP"), which is based on achievement of various levels of operating income as percentage of revenue. (See below for the Financial Performance Matrix.) For one new officer position in 2019, it was determined that completion of key development, operational projects, and objectives to deliver future new revenue and profitability was critical. As a result, 50% of his MICP would be measured by these objectives and the other 50% by the FP measure. For 2020 as a result of the continued investment in Data I/O's SentriX® Security Deployment Platform, and the critical focus on completion of key development, customer objectives, and revenue growth objectives related to SentriX to deliver future new revenue and profitability, Executive Officers had their MICP measures spilt 50% SentriX objectives and 50% FP. For 2021, the focus is on revenue growth for SentriX and profitability for the rest of the business. Executive Officers will have their 2021 MICP measures spilt 30% on SentriX revenue objectives and 70% on FP. The SentriX revenue objective is based on revenue growth in 2021 over a minimum threshold. The FP will be based on achievement of various levels of adjusted operating income established for the year as a percentage of revenue.

The Compensation Committee believes that for 2019, 2020 and 2021, the applicable measures of key results for Data I/O have affected or will affect near-term and long-term shareholder value. A greater or lesser percentage of MICP Target is to be paid based on Data I/O's actual achievement of these measures with the payout target typically based on company financial plans as the Board determines appropriate. For 2019, as a result of an operating loss the FP measure was 0% and no MICP FP payout was made. For 2020, as a result of an operating loss the FP measure was 0% and no MICP FP payout was made. The SentriX objectives for 2020 were subject to a minimum defined operating income which was not met, so the payout was 0%. The Compensation Committee retains discretion to adjust the calculation of the two measures for changes outside normal business operations such as acquisitions or asset sales.

Data I/O Corporation 2019 & 2020 MICP Variable Compensation Matrix

Range of Payouts (actual results interpolated)

Target

Target 200%

The 2020 MICP Variable Compensation Matrix consists of two possible measures: Financial Performance (FP) and a SentriX performance objective. The 2019 Variable Compensation Matrix consisted of solely of Financial Performance (FP).

2019 & 2020 Financial Performance Matrix			rarget		rarget 200%
			Payout		Payout
Operating Profit as a % of Revenue	0.0%	3.0%	6.0%	9.0%	12.0%
FP matrix payout as a % of Target	0%	50%	100%	150%	200%
2020 Performance Objectives for SentriX	Minimum		Target 100%		Target 200%
			Payou	t	Payout
Product Revenue Objectives 50%	\$ Threshold		4X \$ Thr	reshold	8X \$ Threshold
Product and Marketing Objectives 50%	0%		100)%	

Overall limitation: No Payout unless defined operating income minimum achieved

2010 8, 2020 Einancial Portormanco Matrix

• Long-Term Equity Incentives. The Compensation Committee approves grants under the Data I/O Corporation 2000 Stock Compensation Incentive Plan (the "2000 Plan"). This is Data I/O's only long-term employee incentive plan. The primary purpose of the 2000 Plan is to make a significant element of executive pay a reward for taking actions which maximize shareholder value over time. Generally, new options or stock awards are granted under the 2000 Plan. New options or stock awards may also be granted to the Board of Directors under the 2000 Plan.

Award Criteria

The Compensation Committee grants options or restricted stock unit awards based primarily on its perception of the executive's ability to affect future shareholder value and secondarily on the competitive conditions in the market for highly-qualified executives who typically command compensation packages which include a significant equity incentive. All restricted stock unit awards granted to our executive officers in 2020 and 2019 were based on these criteria.

Exercise Price

Historically, all options granted by Data I/O have been granted with an exercise price equal to the fair market value (an average of the day's high and low selling price) of Data I/O's Common Stock on the date of grant and, accordingly, will only have value if Data I/O's stock price increases. Options granted to employees are non-qualified.

Vesting and Exercise

Options granted to employees generally vest quarterly over four years at a rate of 6.25% per quarter and have a six-year term. Options granted to non-employee Directors are also non-qualified options and vest quarterly over a three-year period. The current primary form of equity compensation is restricted stock grants. Restricted stock grants to employees typically vest annually over a four-year period. Restricted stock grants to non-employee Directors vest in one year or on the date of the next Annual Meeting of Shareholders, if earlier. All grants are subject to possible acceleration of vesting in connection with certain events leading to a change in control of Data I/O or in the event in a change in control or at any other time at the discretion of the Compensation Committee. All options granted to executive officers are issued in tandem with limited stock appreciation rights ("SARs"), which become exercisable only in the event of a change in control of Data I/O. See: "Change in Control and other Termination Arrangements."

Award Process

The timing of our typical grant/award is usually determined well in advance, with approval at a scheduled meeting of our Board of Directors or its Compensation Committee with the grant date generally to be effective on the date of our next Annual

Meeting of Shareholders. The Annual Meeting of Shareholders does not coincide with any of our scheduled earning releases. We do not anticipate option grants or restricted stock awards at other dates, except for grants/awards to new employees based on their first date of employment or in specific circumstances approved by the Compensation Committee. The grant/award date is established when the Compensation Committee approves the grant/award and all key terms have been determined. If at the time of any planned grant/award date, any member of our Board of Directors or Executive Officers is aware of material non-public information, the Company would not generally make the planned grant/award. In such an event, as soon as practical after material information is made public, the Compensation Committee would authorize the delayed grant/award.

- Benefits. Executive Officers of Data I/O are eligible for the same benefits as other Data I/O employees. Data I/O has no defined benefit pension programs. Data I/O has a 401(k) tax qualified retirement savings plan in which all U.S. based employees, including U.S. Executive Officers are able to contribute the lesser of up to 100% of their annual salary or the limit prescribed by the IRS on a Roth or pre-tax basis. Data I/O will match up to 4% of pay contributed. Matching contributions in any year require employment on December 31, except in the case of retirement per the plan, and vest after three years of service credit.
- Perquisites and Other Personal Benefits. We believe perquisites are not conditioned upon performance, create divisions among employees, undermine morale, and are generally inconsistent with our compensation philosophy and policy of equitable treatment of all employees based upon their contribution to our business. No executive officer received perquisites valued at \$10,000 or more in 2019 or 2020.
- Individual Executive Officers' Performance. The base salary of each executive officer is reviewed annually by the President and Chief Executive Officer. This is done on the basis of a review by the President and Chief Executive Officer, evaluating the executive's prior year performance against their individual job responsibilities and attainment of corporate objectives and Data I/O's financial performance. In developing executive compensation packages to recommend to the Compensation Committee, the President and Chief Executive Officer considers, in addition to each executive's prior year performance, the executive's long-term value to Data I/O, the executive's pay relative to that for comparable surveyed jobs, the executive's experience and ability relative to executives in similar positions, and the current year increases in executive compensation projected in industry surveys.

The Compensation Committee then reviews the President and Chief Executive Officer's recommendations for executive officers' total compensation and approves final decisions on pay for each executive officer based on the President and Chief Executive Officer's summary of the executive officer's performance and on the other criteria and survey data described above. In this process, the Compensation Committee consults with Data I/O's President and Chief Executive Officer.

The base salary, total cash compensation, and long-term equity incentive compensation for the President and CEO are reviewed annually by the Compensation Committee. This review includes a written evaluation of the CEO's performance for the previous year. The Compensation Committee meets annually without the President and Chief Executive Officer to evaluate his performance and to develop a recommendation for his compensation for the coming year. In addition to reviewing Data I/O's financial performance for the prior year, the Committee reviewed compensation surveys for chief executive officers and the President and Chief Executive Officer's individual performance, including development and execution of short-term and long-term strategic objectives, Data I/O revenue growth and profitability, the achievement of which is expected to increase shareholder value.

The Compensation Committee determined the compensation package, including salary, bonus, MICP participation, stock option grants, restricted stock awards, and other benefits for Mr. Ambrose, President and Chief Executive Officer, based on the Committee's perception of his qualifications for the position and his ability to affect future shareholder value, results delivered, compensation surveys and the competitive conditions in the market. No salary base pay adjustments were made in 2019 or 2020 for Mr. Ambrose.

Consideration of Risk in Compensation

The Compensation Committee believes that promoting the creation of long-term value discourages behavior that leads to excessive risk. The Compensation Committee believes that the following features of our compensation programs provide incentives for the

creation of long-term shareholder value and encourage high achievement by our executive officers without encouraging inappropriate or unnecessary risks:

- Our long-term incentives in the form of stock options or restricted stock awards are at the discretion of the Compensation Committee and not formulaic.
- Stock options become exercisable over a four-year period and remain exercisable for up to six years from the date of grant
 and restricted stock awards vest over a four-year period, encouraging executives to look to long-term appreciation in equity
 values.
- We balance short and long-term decision-making with the annual cash incentive program and stock options and restricted stock that vest over four years.
- Because of the extent of the CEO and CFO's direct stock ownership, they could lose significant wealth if Data I/O were exposed to inappropriate or unnecessary risks which in turn affected our stock price.
- The metric used in the MICP measure is set by the Compensation Committee, which believes it will drive shareholder value.
 Moreover, the Committee attempts to set ranges for these measures that encourage success without encouraging excessive risk-taking to achieve short-term results.
- In addition, the overall MICP incentive compensation cannot exceed two times the MICP Target amount, no matter how much performance exceeds the measures established for the year.

Accounting and Tax Considerations of our Compensation Program

Options granted to employees are non-qualified options because of the more favorable tax treatment for Data I/O. We are required to value granted stock options under the fair value method and expense those amounts in the income statement over the stock option's remaining vesting period. Restricted stock is valued at its fair value on the award date and is expensed over its vesting period.

We have structured our compensation program in the past to comply with Internal Revenue Code Sections 162(m) and 409A. Under Section 162(m) of the Internal Revenue Code, a limitation was placed on tax deductions of any publicly-held corporation for individual compensation to covered employees (generally the chief executive officer and the three other most highly compensated executive officers, other than the chief financial officer, whose compensation must be disclosed pursuant to rules and regulations under the Securities Exchange Act of 1934) exceeding \$1 million in any taxable year, unless the compensation is performance-based. Tax reform in 2017 has revised and eliminated the performance-based pay exception for new or modified compensation arrangements for 2018 and beyond. The Compensation Committee is aware of this limitation and believes that no compensation paid in 2019 or 2020 or to be paid in 2021 by Data I/O will exceed the \$1 million limitation of Section 162(m), as portions of taxable equity compensation expected to be issued in 2021 continue to be excluded under a prior unmodified performance-based compensation arrangement, except possibly related to a change of control. The new Section 162(m) treatment will be part of future compensation considerations.

Change in Control and other Termination Arrangements

• Change in Control Arrangements. Data I/O has entered into agreements (the "Executive Agreements") with Messrs. Ambrose, Gulati, Hatlen and Tidwell which entitle them to receive payments if they are terminated without cause or resign with good reason within specified periods before or after the occurrence of certain events deemed to involve a change in control of Data I/O. Effective July 30, 2014, the Executive Agreements of Messrs. Ambrose, Gulati, and Hatlen were amended and restated and the term of their Executive Agreements was extended with automatic renewal provisions. An Executive Agreement was entered into Mr. Tidwell on his hiring in 2019. The Executive Agreements ensure appropriate incentives are in place for Messrs. Ambrose, Gulati, Hatlen and Tidwell to complete any change in control related transaction and transition, as well as comply with the provisions of Section 409A of the Internal Revenue Code. The Executive Agreements state that the resulting additional severance will be calculated under the Executive Agreements based on Data I/O's severance arrangements in place immediately preceding the date of a change in control (See: "Other Termination Arrangements" below for current severance policy). The Executive Agreements provide for continuation and vesting in Data I/O's matching 401(k) contributions through the date of termination after a change in control and include a reimbursement allowance of \$20,000

for outplacement services. The Executive Agreements also have a transaction closing incentive of one-half year's annual salary for Messrs. Ambrose, Gulati, Hatlen and Tidwell to encourage the consideration of all forms of strategic alternatives.

Data I/O's option grants and stock awards have been granted pursuant to the provisions of the 2000 Plan. The Change in Control provision applicable to the 2000 Plan is as follows:

2000 Plan

The 2000 Plan allows for the granting of "Awards", which include options, restricted stock and other awards made pursuant to the 2000 Plan. Subject to any different terms set forth in the award agreement, vesting of "qualifying" options and restricted stock awards may be affected by a Change in Control as described out in the table below. A "Change in Control" is defined to include (i) a merger or consolidation of the Company in which more than 50% of the voting power of the Company's outstanding stock after the transaction is owned by persons who are not shareholders immediately prior to such transaction, and (ii) the sale or transfer of all or substantially all of the Company's assets. A "Qualifying Award' is defined as an option or other Award that has been held for at least 180 days as of the Change of Control. "Qualifying Shares" means common stock issued pursuant to a Qualifying Award which are subject to the right of Data I/O to repurchase some or all of such shares at the original purchase price (if any) upon the holder's termination of services to Data I/O.

Treatment of Awards on a Change in Control Acceleration of Vesting Subject to certain limitations, the vesting of Qualifying The outstanding Awards do not remain outstanding or are not assumed by the surviving entity or replaced with Awards is accelerated in full. Restricted stock will vest and comparable Awards. options will be exercisable in full prior to the effective date of the Change of Control. The outstanding Awards remain outstanding after a Change Subject to certain limitations, the vesting of outstanding of Control or are assumed by the surviving entity or replaced Qualifying Awards will be accelerated to the extent of 25% of with comparable Awards. the unvested portion thereof. The remaining 75% of the unvested portion will vest in accordance with the vesting schedule set forth in the applicable Award agreement. The outstanding Awards remain outstanding after a Change All Awards held by such person will be accelerated in full. Restricted stock will vest and options will be exercisable in full of Control or are assumed by the surviving entity or replaced with comparable Awards, but the holder of a Qualifying for a period of 90 days commencing on the effective date of Award is terminated involuntarily within 180 days of the the involuntary termination, or if shorter, the remaining term Change of Control. of the option.

In 1983, Data I/O adopted a SAR Plan which allows the Board of Directors to grant to each director, executive officer or holder of 10% or more of the stock of Data I/O a SAR with respect to certain options granted to these parties. A SAR has been granted in tandem with each option granted to an executive officer of Data I/O. SARs granted which have been held for at least six months are exercisable for a period of 20 days following the occurrence of either of the following events: (i) the close of business on the day that a tender or exchange offer by any person (with certain exceptions) is first published or sent or given if, upon consummation thereof, such person would be the beneficial owner of 30% or more of the shares of Common Stock then outstanding; or (ii) approval by the shareholders of Data I/O (or, if later, approval by the shareholders of a third party) of any merger, consolidation, reorganization or other transaction providing for the conversion or exchange of more than 50% of the outstanding shares of Data I/O's Common Stock into securities of a third party, or cash, or property, or a combination of any of the foregoing.

• Other Termination Arrangements. Data I/O has a severance policy for U.S. employees that provides for severance payouts for terminations without cause based upon years of service. The current formula, effective March 1, 2014, is 1 week pay for each year of service with a limit of six months' pay. For Mr. Hatlen, the prior standard formula applies, with pay and service years frozen at March 1, 2014, which provided 1.5 weeks of pay for each year of service for those with 10 or more years of service. Mr. Ambrose, Mr. Hatlen, Mr. Gulati and Mr. Tidwell had at March 22, 2021, approximately 8, 29, 8 and 2 years of service, respectively. Mr. Ambrose is entitled to a one year of base salary severance, except in the case of a change in control, as part of his employment arrangement. Mr. Gulati and Mr. Tidwell are entitled to a one-half year of base salary severance, except in the case of a change in control, as part of his employment arrangement. Data I/O does not have a formal policy regarding executive severance but has generally provided an amount it believes is consistent with severance typically provided for executives in similar positions and with similar periods of service.

Change in Control and Other Termination Arrangements

Termination without cause and Change in

	and Change in				
	Control not	Termination wit	Termination without cause and		applicable without
	applicable	Change in Con	trol applicable	termin	ation
Name	Compensation (3)	Compensation (2)	Option/SAR/RSA Vesting (1)	Compensation (4)	Option/SAR/RSA Vesting (1)
Anthony Ambrose (5)	\$330,000	\$645,308	172,500	\$165,000	172,500
Joel S. Hatlen ⁽³⁾	\$134,351	\$554,351	60,626	\$120,000	60,626
Rajeev Gulati ⁽⁶⁾	\$115,000	\$436,949	60,626	\$115,000	60,626
Michael Tidwell (6)	\$112,500	\$380,324	93,125	\$112,500	93,125

⁽¹⁾ Maximum vesting on Change in Control as of March 22, 2021.

Represents the Data I/O standard employee severance, alternative Executive/Employment Agreement severance, change in control transition/closing incentive, and outplacement expense reimbursement, as applicable as of March 22, 2021.

Minimum amount per Data I/O standard employee severance plan; no formal executive severance plan is in place as of March 22, 2021. A letter agreement provides that Mr. Hatlen's severance shall be equal to the Data I/O standard severance in effect at March 1, 2014. (See (5) below for Mr. Ambrose and (6) below for Mr. Gulati and Mr. Tidwell.)

⁽⁴⁾ Represents change in control transition/closing incentive as of March 22, 2021.

⁽⁵⁾ Mr. Ambrose is entitled to a one year of base salary severance, except in the case of a change in control, as part of his employment arrangement.

⁽⁶⁾ Mr. Gulati and Mr. Tidwell are entitled to a one-half year of base salary severance, except in the case of a change in control, as part of their employment arrangement.

SUMMARY COMPENSATION TABLE

The following table shows compensation paid by Data I/O for services rendered during 2019 and 2020 to each of our named executive officers.

Name ¹ (a)	Year (b)	Salary ² (c)	Bonus ³ (d)	Stock Awards ⁴ (e)	Option Awards ^{4,5} (f)	Non-Equity Incentive Plan Compen- sation ⁶ (g)	Non- Qualified Deferred Compen- sation Earnings ⁷ (h)	All Other Compen- sation ⁸ (i)	Total (j)
Anthony Ambrose	2020	\$297,000	\$0	\$270,900	\$0	\$0	\$0	\$10,400	\$578,300
Chief Executive Officer & President	2019	\$330,000	\$0	\$267,900	\$0	\$0	\$0	\$12,662	\$610,562
Joel Hatlen	2020	\$216,000	\$0	\$90,300	\$0	\$0	\$0	\$10,227	\$316,527
Vice President Chief Operating & Financial Officer Secretary, Treasurer	2019	\$240,000	\$0	\$89,300	\$0	\$0	\$0	\$12,638	\$341,938
Rajeev Gulati	2020	\$207,000	\$0	\$90,300	\$0	\$0	\$0	\$8,918	\$306,218
Vice President Chief Technical Officer	2019	\$230,000	\$0	\$89,300	\$0	\$0	\$0	\$12,232	\$331,532
Michael Tidwell	2020	\$202,500	\$0	\$120,400	\$0	\$0	\$0	\$9,893	\$332,793
Vice President Marketing & Business Development	2019	\$150,541	\$0	\$286,350	\$60,973	\$29,205	\$0	\$6,354	\$533,423

- Data I/O currently has four named executive officers.
- No base pay adjustments were made for executive officers in 2020 or 2019 except on hiring. Base pay adjustments for executive officers were last made effective July 1, 2017. In 2020, for the second and third quarter, a COVID-19 impact related 20% temporary pay reduction was in effect.
- (3) Employee patent and service awards paid in 2020.
- ⁽⁴⁾ Amount represents the fair value of restricted stock or the fair value of stock options granted during the year.
- (5) All options granted to executive officers are granted in tandem with an equal number of SARs. SARs are only exercisable upon the occurrence of certain events leading to a change in the control of Data I/O. See "Change in Control and Other Termination Arrangements." No options and SARs were awarded to executive officers in 2020.
- (6) Amounts earned under the MICP variable compensation arrangement in place for the year as approved by the Board.
- (7) Not applicable for Data I/O.
- (8) These amounts represent for Mr. Ambrose, Mr. Hatlen, Mr. Gulati and Mr. Tidwell, Data I/O's matching contributions to Data I/O's 401(k) Plan, and the value of group term life insurance in excess of premiums paid by each of the executive officers under the standard employee benefit plans.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END

		0	ption Awards		Stock Awards				
	Number of Securities Underlying Unexer- cised Options	Number of Securities Underlying Unexe- rcised Options Unexer-	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned	Option Exercise	Option Expiration	Number of Shares or Units of Stock Held That Have Not	Market Value of Shares or Units of Stock That Have Not	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not
Name	Exercisable (#)	cisable (#)	Options (#)	Price (\$)	Date	Vested #	Vested (\$)	Vested (#)	Vested (\$)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Anthony Ambrose	0	0	0			172,500	\$710,700	0	\$0
Joel Hatlen	0	0	0			60,626	\$249,779	0	\$0
Rajeev Gulati	0	0	0			60,626	\$249,779	0	\$0
Michael Tidwell	9,375	15,625	0	\$4.98	5/1/2025	77,500	\$319,300	0	\$0

EQUITY COMPENSATION PLAN INFORMATION

The following table gives information about Data I/O's Common Stock that may be issued upon the exercise of options and rights under all of Data I/O's existing equity compensation plans as of December 31, 2020.

	(a) Number of securities to be issued upon the exercise of outstanding options, warrants and rights	(b) Weighted— average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)
Equity compensation plans approved by the security holders (1) (2)	3,175	\$4.90	286,925
Equity compensation plans not approved by the security holders ⁽³⁾ Total	25,000 28,175	\$4.98 \$4.97	 - 286,925

Represents shares of our Common Stock issuable pursuant to the Data I/O Corporation 2000 Stock Compensation Incentive Plan, 1982 Employee Stock Purchase Plan and 1996 Director Fee Plan. Table excludes unvested restricted stock awards of 605,728 from the 2000 Plan.

⁽²⁾ Stock Appreciation Rights Plan ("SAR") provides that directors, executive officers or holders of 10% or more of our Common Stock have an accompanying SAR with respect to each exercisable option. While the plan has been approved by the security holders, no amounts are included in columns (a), (b), or (c) relating to the SAR.

⁽³⁾ Inducement grant to Michael Tidwell of 25,000 non-qualified stock options. Table excludes remaining unvested 2019 restricted stock inducement grant of 37,500 to Michael Tidwell.

PROPOSAL 2: RATIFICATION OF INDEPENDENT AUDITORS

The Board of Directors requests that the shareholders ratify the continued appointment of Grant Thornton LLP to serve as Data I/O's independent auditors for calendar year 2021. Grant Thornton LLP examined the consolidated financial statements of Data I/O for the year ended December 31, 2020. Representatives of Grant Thornton LLP are invited to be present at the Annual Meeting to make a statement if they desire to do so and to respond to questions by shareholders.

The Board recommends a vote "FOR" the continued appointment of Grant Thornton LLP to serve as Data I/O's independent auditors for calendar year 2021.

PROPOSAL 3: SAY ON PAY - ADVISORY VOTE ON EXECUTIVE COMPENSATION

The Board of Directors requests that the shareholders approve, on an advisory basis, the compensation paid to Data I/O's Named Executive Officers, as described in "Executive Compensation", pursuant to the following Advisory Resolution:

"RESOLVED, that Data I/O's shareholders approve, on an advisory basis, the compensation of Data I/O's named executive officers, as disclosed in Data I/O's Proxy Statement for the 2021 Annual Meeting of Shareholders pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the 2020 Summary Compensation Table and the other related tables and disclosure."

Our executive compensation program contains elements of cash, incentive and equity-based compensation and is designed to align the interests of our executives with those of our shareholders. The "Executive Compensation" section of this Proxy Statement, describes in detail our executive compensation programs.

The Board has implemented an executive compensation program that is intended to reward financial performance based on goals established by the Board. The Board fosters a performance-oriented culture by linking a significant portion of each executive officer's compensation to overall Company financial performance (70%), as measured in 2021 by adjusted operating income as a percentage of revenue, and SentriX Revenue Objectives (30%), as measured by revenue growth targets, which the Company believes are important metrics for Data I/O and its shareholders. We believe that equity awards align the interests of our executives with those of our long-term shareholders by encouraging long-term performance and incentivizing our executives to increase long-term shareholder value. Equity awards represent a key component, and are a significant portion, of our executive compensation.

The Board has designed Data I/O's executive compensation program to attract, motivate, reward and retain our executive officers to achieve Data I/O's corporate objectives and increase shareholder value.

The Say on Pay vote is advisory and not binding on Data I/O or the Board of Directors; however, the Board will consider the outcome of the vote when making future compensation decisions for our executive officers.

The Board recommends a vote "FOR" the Advisory Resolution (Say on Pay) approving the compensation of the Company's named executive officers as described in this Proxy Statement.

PROPOSAL 4: AMENDMENT AND RESTATEMENT OF 2000 PLAN

At the Annual Meeting, the shareholders of Data I/O will be asked to approve an amendment and restatement of the 2000 Plan, which, if approved, will increase the number of shares of Common Stock that have been made available under the 2000 Plan by an additional 700,000 shares, to an aggregate of 3,228,739 shares, the fair market value of such securities is \$17,338,328 as of March 22, 2021, as well as make certain other modifications to the 2000 Plan. As of March 22, 2021, Data I/O has outstanding options and awards under the 2000 Plan with respect to598,228 shares of Common Stock and 128,893 shares of Common Stock available for grants. Changes or updates to the plan include: addition of 700,000 shares to the plan along with updating the amendment notes, and making explicit three items previously silent on 1) repricing of stock option's exercise price shall, in accordance with NASDAQ, require shareholder approval; 2) excise tax gross ups are not allowed; and 3) awards are not transferrable to 3rd party financial institutions. Approval of the proposed increase will also be deemed a ratification of the terms of the 2000 Plan, as amended.

The Board of Directors believes that the 2000 Plan has contributed to strengthening the incentive of participating employees to achieve the objectives of Data I/O and its shareholders by encouraging employees to acquire a greater proprietary interest in Data I/O. The Board of Directors believes that additional shares must be reserved for use under the 2000 Plan to enable Data I/O to attract and

retain key employees through the granting of options under the 2000 Plan. The proposed increase in the number of shares reserved under the 2000 Plan is not required or intended to cover awards previously made under the 2000 Plan. As such, no new plan benefits have been granted to date, and future awards under the 2000 Plan are not yet determinable. Information concerning outstanding awards under the 2000 Plan is available in this proxy statement in the following tables and the narrative accompanying them: Summary Compensation Table, Outstanding Equity Awards at Fiscal Year End and Director Compensation. See "Equity Plan Compensation Information" for additional information about Data I/O's existing equity compensation plans which forms a part of this proposal. The last sale price for the Common Stock, as reported by The NASDAQ Capital Market on March 22, 2021, was \$5.37 per share.

This proposal will be approved, if a quorum is present, and if the number of votes cast, in person or by proxy, in favor of the proposal exceeds the number of votes cast against the proposal. **The Board of Directors recommends a vote FOR approval of the proposed amendment and restatement of the 2000 Plan.** Unless instructed otherwise, it is the intention of the persons named in the accompanying form of proxy to vote shares represented by properly executed proxies in favor of the above-referenced amendment to the 2000 Plan.

Previously Granted Awards Under the 2000 Plan

The following table provides information related to the total number of Common Shares issuable in connection with outstanding, unexercised Award grants under the 2000 Plan held by each of the following individuals and groups as at March 22, 2021.

Name	Stock Options/Awards Previously Granted #
Anthony Ambrose	172,500
Joel Hatlen	60,626
Rajeev Gulati	60,626
Michael Tidwell	40,000
All executive officers as a group	333,752
All directors who are not executive officers as a group	63,551
All employees who are not executive officers as a group	200,925

Description of the 2000 Plan, As Proposed to be Amended and Restated

The following description of the 2000 Plan, as proposed to be amended and restated, is qualified in its entirety by reference to the full text of such 2000 Plan, a copy of which is attached to this Proxy Statement as Appendix A. The purpose of the 2000 Plan is to enhance the long-term shareholder value of Data I/O by offering opportunities to employees, persons to whom offers of employment have been extended, directors, officers, consultants, agents, advisors and independent contractors of Data I/O and its subsidiaries to participate in Data I/O's growth and success, and to encourage them to remain in the service of Data I/O and its subsidiaries and to acquire and maintain stock ownership in Data I/O. The 2000 Plan may be administered either by the Board of Directors or a committee or committees appointed by (in either case, the "Committee"), and consisting of two or more independent members of, the Board of Directors. The Committee will have broad discretion to determine the amount and type of awards and terms and conditions of the awards. Individual grants will generally be based on a person's present and potential contribution to Data I/O.

As of March 22, 2021, Data I/O had approximately 96 employees and 4 non-employee directors who would be eligible to participate in the 2000 Plan. Consultants, agents, advisors, and independent contractors can be eligible under the 2000 Plan. Because the grant of awards is based upon a determination made by the Committee after a consideration of various factors, Data I/O currently cannot determine the nature and amount of any awards that will be granted in the future to any eligible individual or group of individuals. However, with respect to awards granted prior to 2021, the maximum number of shares that could be granted under the 2000 Plan

during any calendar year to covered employees (generally the chief executive officer and the three other most highly compensated officers, other than the chief financial officer, whose compensation is required to be disclosed pursuant to the rules and regulations under the Securities Exchange Act of 1934, as amended) was 200,000, except that Data I/O could make additional one-time grants to newly hired participants of up to 100,000 shares per such participant. In addition, the maximum number of shares that can be granted to a non-employee director of Data I/O during any calendar year is limited to 100,000.

Awards may be granted in the form of incentive stock options ("ISOs") within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), nonqualified stock options ("NQOs") (each ISO or NQO, an "Option" and collectively, "Options"), stock appreciation rights, stock awards in the form of restricted stock ("Restricted Stock"), or other arrangements determined by the Committee. Any award may be granted either alone or in tandem with other awards granted under the 2000 Plan. The option price of ISOs shall be as determined by the Committee, but shall not be less than 100% of the fair market value of the Common Stock on the grant date. The option price of NQOs may be less than the fair market value of the Common Stock on the date of the grant; however, as a matter of policy Data I/O does not grant options with an exercise price that is less than the fair market value of the shares on the date of grant of the option. The Committee may condition the grant of the award upon the attainment of specified performance goals or other criteria, which need not be the same for all participants. No ISOs may be granted under the 2000 Plan on or after February 22, 2027 (February 21, 2028 if this proposal is approved), but ISOs outstanding under the 2000 Plan may extend beyond that date.

Options. Options granted under the 2000 Plan may be ISOs or NQOs. The exercise price of ISOs may not be less than the fair market value of the shares subject to the ISO on the date of grant. The term of any ISO granted under the 2000 Plan may not exceed ten years. In addition, ISOs are subject to certain other limitations in order to take advantage of the favorable U.S. tax treatment that may be available for ISOs.

Restricted Stock. Restricted Stock awards consist of non-transferable shares of Common Stock of Data I/O which may be subject to a right of purchase by Data I/O although Data I/O has not subjected any such awards to a repurchase right. The Committee may provide for the lapse of the transfer restrictions over a period of time, or may accelerate or waive such restrictions, in whole or in part, based on service, performance or other criteria determined by the Committee.

Stock Appreciation Rights. A stock appreciation right will give the holder the right to receive an appreciation distribution in an amount equal to the excess of the fair market value of the number of shares of Common Stock covered by the right over the exercise price per share subject to the right. Stock appreciation rights may be granted separately or in tandem with a related Option. Payment may be made in a combination of shares of Common Stock or in cash, as determined by the Committee.

The consideration payable upon issuance or exercise of an award and any taxes related to an award must generally be paid in cash or check. However, the Committee, in its sole discretion, may, either at the time the Option is granted or at any time before it is exercised and subject to such limitations as the Committee may determine, authorize payment by the tender of Common Stock already owned by the participant for at least six months having a fair market value on the day prior to the exercise date equal to the aggregate Option exercise price, by net exercise of the Option, by delivery of a promissory note, by delivery of a properly executed exercise notice, together with irrevocable instruction (i) to a third-party designated by Data I/O to deliver to Data I/O the amount of sale or loan proceeds to pay the exercise price and withholding tax obligations and (ii) to Data I/O to deliver the certificates for such shares to the third-party, or by such other consideration as the Committee may permit. In addition, to assist a holder of award (excluding a holder who is an officer or director of Data I/O due to Sarbanes Oxley restrictions) in acquiring shares of Common Stock pursuant to an award granted under the 2000 Plan, the Committee, in its sole discretion, may authorize, either at the grant date or at any time before the acquisition of Common Stock pursuant to the award, the extension of a loan to the holder by Data I/O, the payment by the holder of the purchase price, if any, of the Common Stock in installments, or the guarantee by Data I/O of a loan obtained by the grantee from a third-party. Awards generally may be exercised at any time within three months after termination of a participant's employment by, or consulting relationship with, Data I/O (but, only to the extent exercisable or payable at the time of termination). However, if termination is due to the participant's death or disability, the award generally may be exercised for one year. Except as authorized by the Committee, no award shall be assignable or otherwise transferable by a participant other than by will or by the laws of descent and distribution.

The Committee may adjust the performance goals and measurements applicable to awards. The Committee also may waive in whole or in part any or all restrictions, conditions, vesting or forfeiture with respect to any award granted under the 2000 Plan. The Board of Directors may amend, alter or discontinue the 2000 Plan or any award at any time, except that the consent of a participant is required if the participant's rights under an outstanding award would be impaired. In addition, the shareholders of Data I/O must approve any amendment, alteration or discontinuance of the 2000 Plan that would (i) increase the total number of shares reserved

under the 2000 Plan, (ii) with respect to provisions solely as they relate to ISOs, to the extent required for the 2000 Plan to comply with Section 422 of the Code, (iii) to the extent required by other applicable laws, rules or regulations or (iv) to the extent that the Board of Directors otherwise concludes that shareholder approval is advisable.

The 2000 Plan constitutes an unfunded plan for incentive and deferred compensation. Data I/O is not required to create trusts or arrangements to meet its obligations under the 2000 Plan to deliver stock or make payments.

In the event of a "change in control" of Data I/O, as defined in the 2000 Plan, in which the outstanding options do not remain outstanding or are not assumed by the surviving entity or replaced with comparable options, the vesting of outstanding "qualifying" awards under the 2000 Plan will, unless the applicable agreement with respect to the award or the Committee determines otherwise, subject to certain limitations, be accelerated in full. If outstanding options remain outstanding after a change of control or are assumed by the surviving entity or replaced with comparable options, subject to certain limitations, the vesting of outstanding "qualifying" options will be accelerated to the extent of 25% of the unvested portion thereof and the vesting of outstanding Qualifying Shares will be accelerated to the extent of 25% of the unvested portion thereof. Director option grants and certain change in control agreements provide for 100% vesting of all options on a change in control. Further, if the holder of any "qualifying" award which remains outstanding or is assumed by the surviving entity in a change of control transaction is terminated involuntarily within 180 days of the change of control, the vesting of all options and other awards held by such person will be accelerated in full. A "qualifying" award is defined as an option or award that has been held for at least 180 days as of the change of control. Qualifying Shares means common stock issued pursuant to a "qualifying" award which are subject to the right of Data I/O to repurchase some or all of such shares at the original purchase price (if any) upon the holder's termination of services to Data I/O. A "change in control" is defined to include (i) a merger or consolidation of Data I/O in which more than 50% of the voting power of Data I/O's outstanding stock outstanding after the transaction is owned by persons who are not shareholders immediately prior to such transaction, and (ii) the sale or transfer of all or substantially all of Data I/O's assets.

Certain Federal Income Tax Consequences

THE FOLLOWING SUMMARY OF FEDERAL INCOME TAX CONSEQUENCES IS BASED UPON EXISTING STATUTES, REGULATIONS AND INTERPRETATIONS THEREOF. THE APPLICABLE RULES ARE COMPLEX, AND INCOME TAX CONSEQUENCES MAY VARY DEPENDING UPON THE PARTICULAR CIRCUMSTANCES OF EACH PLAN PARTICIPANT. THIS PROXY STATEMENT DESCRIBES FEDERAL INCOME TAX CONSEQUENCES OF GENERAL APPLICABILITY, BUT DOES NOT PURPORT TO DESCRIBE PARTICULAR CONSEQUENCES TO EACH INDIVIDUAL PLAN PARTICIPANT, OR FOREIGN, STATE OR LOCAL INCOME TAX CONSEQUENCES, WHICH MAY DIFFER FROM THE UNITED STATES FEDERAL INCOME TAX CONSEQUENCES.

Incentive Stock Options

Awards and Exercise of Options. ISOs are intended to constitute "incentive stock options" within the meaning of Section 422 of the Code. ISOs may be granted only to employees of Data I/O (including directors who are also employees). The recipient of an Option (the "Optionee") does not recognize taxable income upon either the grant or exercise of an ISO. However, the excess of the fair market value of the shares purchased upon exercise over the Option exercise price (the "Option Spread") is includable in the Optionee's "alternative minimum taxable income ("AMTI") for purposes of the alternative minimum tax ("AMT"). The Option Spread is generally measured on the date of exercise and is includable in AMTI in the year of exercise. Special rules regarding the time of AMTI inclusion may apply for shares subject to a "substantial risk of forfeiture" (including, in the case of each person subject to the reporting requirements of Section 16(b) of the Exchange Act). In addition, when stock is acquired subject to a "substantial risk of forfeiture", an Optionee's holding period for purposes of determining whether any capital gain or loss on sale is long-term will generally not begin until the restriction lapses.

Sale of Option Shares. If an Optionee holds the shares purchased under an ISO for at least two years from the date the ISO was granted and for at least one year from the date such shares were transferred to the Optionee, any gain from a sale of the shares other than to Data I/O should be taxable as capital gain. Under these circumstances, Data I/O would not be entitled to a tax deduction at the time the ISO was exercised or at the time the stock was sold. If an Optionee were to dispose of stock acquired pursuant to an ISO before the end of the required holding periods (a "Disqualifying Disposition"), the amount by which the market value of the stock at the time the ISO was exercised exceeded the exercise price (or, if less, the amount of gain realized on the sale) would be taxable as ordinary income, and Data I/O would be entitled to a corresponding tax deduction in the year of sale. Such income is subject to information reporting requirements. Gain from a Disqualifying Disposition in excess of the amount required to be recognized as ordinary income is capital gain. Optionees are required to notify Data I/O promptly after making a Disqualifying Disposition. If the stock is sold to Data I/O rather than to a third party, the sale may not produce capital gain or loss. A sale of shares to Data I/O will constitute a redemption

of such shares, which could be taxable as a dividend unless the redemption is "not essentially equivalent to a dividend" within the meaning of the Code.

Exercise With Stock. If an Optionee pays for ISO shares with shares of Data I/O acquired under an ISO or a qualified employee stock purchase plan ("Statutory Option Stock"), the tender of shares is a Disqualifying Disposition of the Statutory Option Stock if the above described (or other applicable) holding periods respecting those shares have not been satisfied. If the holding periods with respect to the Statutory Option Stock are satisfied, or the shares were not acquired under a statutory stock option of Data I/O, then any appreciation in value of the surrendered shares is not taxable upon surrender. Special basis and holding period rules apply where previously-owned stock is used to exercise an ISO.

Nonqualified Stock Options

Awards and Exercise of Options. An Optionee is not taxable upon the award of an NQO. Federal income tax consequences upon exercise will depend upon whether the shares thereby acquired are subject to a "substantial risk of forfeiture". If the shares are not subject to a "substantial risk of forfeiture", or if they are so restricted and the Optionee files a Section 83(b) Election with respect to the shares, the Optionee will have ordinary income at the time of exercise measured by the Option Spread on the exercise date. The Optionee's tax basis in the shares will be their fair market value on the date of exercise, and the holding period for purposes of determining whether capital gain or loss upon sale is long- or short-term also will begin on that date. If the shares are subject to a "substantial risk of forfeiture" and no Section 83(b) Election is filed, the Optionee will not be taxable upon exercise, but instead will have ordinary income on the date the stock is no longer subject to a "substantial risk of forfeiture", in an amount equal to the difference between the amount paid for the shares under the Option and their fair market value as of the date of lapse; in addition, the Optionee's holding period will begin on the date of lapse.

Whether or not the shares are subject to a "substantial risk of forfeiture", the amount of ordinary income taxable to an Optionee who was an employee at the time of grant constitutes "supplemental wages" subject to a withholding of income and employment taxes by Data I/O, and Data I/O receives a corresponding income tax deduction.

Sale of Option Shares. Upon sale, other than to Data I/O, of shares acquired under a NQO, an Optionee generally will recognize capital gain or loss to the extent of the difference between the sale price and the Optionee's tax basis in the shares, which will be long-term gain or loss if the employee's holding period in the shares is more than one year. If the stock is sold to Data I/O rather than to a third party, the sale may not produce capital gain or loss. A sale of shares to Data I/O will constitute a redemption of such shares, which could be taxable as a dividend unless the redemption is "not essentially equivalent to a dividend" within the meaning of the Code.

<u>Exercise With Stock.</u> If the Optionee pays the option exercise price by tendering other shares of Common Stock of the Company then owned by the Optionee, the Optionee will recognize ordinary income in an amount equal to the fair market value of the number of shares received upon exercise of the option, which exceed the number of shares tendered by the Optionee.

If the surrendered shares are Statutory Option Stock as described above under "Incentive Stock Options", with respect to which the applicable holding period requirements for favorable income tax treatment have not expired, then the newly acquired shares substituted for the Statutory Option Shares should remain subject to the federal income tax rules governing the surrendered shares, but the surrender should not constitute a Disqualifying Disposition of the surrendered stock.

Net Exercise. If a NQO is exercised through a net exercise, Data I/O will not require payment of the exercise price of the NQO but will reduce the number of shares issued upon exercise by the largest number of whole shares that have a Fair Market Value that does not exceed the aggregate exercise price. With respect to any remaining balance of the aggregate exercise price, Data I/O will accept a cash payment from the Optionee. The Optionee will recognize ordinary income in an amount equal to the excess of the aggregate fair market value of the shares that otherwise would be issued upon exercise of the NQO over the aggregate exercise price of the NQO being exercised. The Optionee's tax basis in the shares received is their fair market value at the time of exercise.

Restricted Stock Awards

<u>Grant and Lapse of Restrictions</u>. Section 83(b) election of the Internal Revenue Code allows the holder of a restricted stock award to elect, within 30 days after the date he receives a restricted stock award, to recognize and be taxed on ordinary income equal to the fair market value of the common stock at that time. If the holder does not make a Section 83(b) election within 30 days from the date he receives a restricted stock award, the holder will recognize ordinary income equal to the fair market value of the common stock at expiration of the restriction period. The holder's basis in the shares will equal their fair market value at the time the holder recognizes

ordinary income. The holder will be taxed at ordinary income rates on cash dividends paid before the end of the restriction period. Subject to the general rules concerning deductibility of compensation, Data I/O will be allowed an income tax deduction in the amount that, and for our taxable year in which, the holder recognizes ordinary income in connection with a restricted stock award. Dividends on the restricted stock that are received by the holder before the end of the restriction period also will be deductible by Data I/O subject to the general rules concerning compensation.

<u>Forfeiture of Restricted Stock</u>. If the holder does not make the Section 83(b) election described above and, before the restriction period expires, he forfeits the restricted stock under the terms of the award, the holder will not recognize any ordinary income in connection with the restricted stock award. If the holder does make a Section 83(b) election and subsequently forfeits the restricted stock under the terms of the award, the holder will not be allowed an ordinary income tax deduction with respect to the forfeiture. However, the holder may be entitled to a capital loss.

Sale of Shares. The holder cannot sell or otherwise dispose of the restricted stock until after the restriction period expires. When shares are sold after the restriction period expires, the holder will recognize gain or loss in an amount by which the sale price of the shares differs from his tax basis in the shares. If, as usually is the case, the shares are a capital asset in the hands of the holder, any gain or loss recognized on a sale or other disposition of the shares will qualify as capital gain or loss. Any capital gain or loss recognized upon sale of the shares will be treated as long-term capital gain or loss if the holder held the shares for more than 12 months from the date he recognized ordinary income with respect to the shares and as short-term capital gain or loss if he held the stock for 12 months or less from the date the holder recognized ordinary income.

Stock Appreciation Rights

Grant. At the time a SAR is granted, the recipient will not recognize any taxable income.

Exercise. At the time the holder exercises a SAR, he will recognize ordinary income equal to the cash received, or fair market value of any shares of common stock received, at that time (in the amount that is equal to the excess of the fair market value of a share of our common stock on the date the SAR is exercised over the grant price of the SAR). The holder's tax basis in any shares received will equal the fair market value of those shares at the time he recognizes ordinary income as a result of exercising the SAR. Subject to the general rules concerning deductibility of compensation, Data I/O will be allowed an income tax deduction in the amount that, and for our taxable year in which, the holder recognizes ordinary income upon the exercise of a SAR.

<u>Sale of Shares</u>. If, as usually is the case, shares received upon exercise of a SAR (if any) are a capital asset in the hands of the holder, any additional gain or loss recognized on a subsequent sale or exchange of the shares will not be ordinary income but will qualify as a capital gain or loss. Any capital gain or loss recognized upon sale of the shares will be characterized as long-term capital gain or loss if the holder held the shares for more than 12 months and as short-term capital gain or loss if the holder held the stock for 12 months or less. For purposes of determining whether the gain will be recognized as long-term or short-term capital gain or loss on the subsequent sale of the shares, the holding period will begin at the time the SAR was exercised.

Change in Control

Depending on the terms of an award and the determination of the Committee, upon a change in control of Data I/O, restrictions on awards may lapse, or the award may mature or become exercisable, on an accelerated schedule. If this type of benefit, or other benefits and payments connected with an award that result from a change in control of Data I/O, are granted to certain individuals (such as our executive officers), the benefits and payments may be deemed to be "parachute payments" within the meaning of Section 280G of the Internal Revenue Code. Section 280G provides that if parachute payments to an individual equal or exceed three times the individual's "base amount," the excess of the parachute payments over one times the base amount (1) will not be deductible by Data I/O and (2) will be subject to a 20% excise tax payable by the individual. "Base amount" is the individual's average annual compensation over the five taxable years preceding the taxable year in which the change in control occurs.

Deductibility of Executive Compensation Under Code Section 162(m)

Section 162(m) of the Code generally limits to \$1,000,000 the amount that a publicly-held corporation is allowed each year to deduct for the compensation paid to each of the corporation's "covered employees" which generally includes the chief executive officer, the chief financial officer and the corporation's three other most highly compensated executive officers whose compensation is required to be disclosed under rules and regulations under the Securities Exchange Act of 1934. Any individual who is a covered employee at any time during a tax year commencing after 2016 will remain a covered employee permanently. However, awards of "qualified

performance-based qualified compensation" that were awarded pursuant to a written binding contract in effect as of November 2, 2017 are "grandfathered" under prior law and are not subject to the \$1,000,000 deduction limit as long as they are not materially modified. In general, to qualify as performance-based compensation, the following requirements need to be satisfied: (1) payments must be computed on the basis of an objective, performance-based compensation standard determined by a committee consisting solely of two or more "outside directors," (2) the material terms under which the compensation is to be paid, including the business criteria upon which the performance goals are based, and a limit on the maximum bonus amount which may be paid to any participant pursuant with respect to any performance period, must be approved by a majority of the corporation's shareholders and (3) the committee must certify that the applicable performance goals were satisfied before payment of any performance-based compensation.

OTHER BUSINESS

As of the date of this Proxy Statement, Data I/O is not aware of any other business to be acted upon at the Annual Meeting. If any other business calling for a vote of the shareholders is properly presented at the meeting, the holders of the proxies will vote or refrain from voting in accordance with their best judgment.

SHAREHOLDER NOMINATIONS AND PROPOSALS FOR THE 2021 ANNUAL MEETING OF SHAREHOLDERS

Data I/O's Bylaws provide that advance notice of nominations for the election of directors at a meeting of shareholders must be delivered to or mailed and received by Data I/O at its principal offices on or before February 17, 2021, in the case of the 2021 annual meeting of shareholders, and in the case of a special meeting of shareholders to elect directors, the close of business on the 10th day following the date on which notice of such meeting is first given to shareholders. Data I/O's Bylaws also provide that advance notice of business to be brought before the 2021 Annual Meeting of Shareholders by a shareholder must be submitted in writing and delivered to, or mailed and received by, Data I/O on or before February 17, 2021.

Each notice of a nomination or proposal of business must contain, among other things: (i) the name and address of the shareholder who intends to make the nomination or proposal; (ii) a representation that the shareholder is a holder of record of stock of Data I/O entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice or to vote at the meeting for the proposal; (iii) a description of all arrangements or understandings between the shareholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by the shareholder and any material interest of such shareholder in any proposal to be submitted to the meeting; (iv) such other information regarding each nominee or proposal as would be required to be included in a proxy statement filed pursuant to the proxy rules of the SEC; and (v) with respect to the nominations, the consent of each nominee to serve as a director of Data I/O if elected.

A copy of the full text of the provisions of Data I/O's Bylaws dealing with shareholder director nominations and proposals is available to shareholders from the Secretary of Data I/O upon written request. The Bylaws may also be accessed online, as a Form 10K exhibit as referenced in our Annual Report on Form 10K. SEC rules establish a deadline for submission of shareholder nominations proposals that are not intended to be included in Data I/O's proxy statement with respect to discretionary voting (the "Discretionary Vote Deadline"). The Discretionary Vote Deadline for the 2021 Annual Meeting was February 17, 2021. If a shareholder gives notice of such a nomination or proposal after the Discretionary Vote Deadline, Data I/O's proxy holders will be allowed to use their discretionary voting authority to vote against the shareholder nomination or proposal when and if the proposal is raised at the 2021 Annual Meeting.

Eligible shareholders who intend to have a nomination or proposal considered for inclusion in Data I/O's proxy materials for presentation at the 2022 Annual Meeting must submit the proposal to Data I/O at its principal offices no later than December 10, 2021. Shareholders who intend to present a nomination or proposal at the 2022 Annual Meeting without inclusion of such nomination or proposal in Data I/O's proxy materials are required to provide notice of such nomination or proposal to Data I/O no later than February 19, 2022, as further directed above.

To qualify as an "eligible" shareholder, a shareholder must have been a record or beneficial owner of at least one percent (1%) of Data I/O's outstanding Common Stock, or shares of Common Stock having a market value of at least \$2,000, for a period of at least one (1) year prior to submitting the proposal, and the shareholder must continue to hold the shares through the date on which the meeting is held.

Data I/O reserves the right to reject, rule out of order, or take appropriate action with respect to any nomination or proposal that does not comply with these and other applicable requirements, but only after Data I/O has notified the shareholder(s) who have submitted

the nomination or proposal of the problem and such shareholder(s) have failed to correct it. This obligation to notify the appropriate shareholder(s) does not apply to the failure to submit such nomination or proposal prior to the deadlines discussed above.

STOCKHOLDERS SHARING THE SAME ADDRESS

To reduce the expenses of delivering duplicate materials, we are taking advantage of the SEC's "house holding" rules which permit us to deliver only one set of proxy materials (or one Notice of Internet Availability of Proxy Materials) to shareholders who share an address unless otherwise requested. If you share an address with another shareholder and have received only one set of these materials, you may request a separate copy at no cost to you by contacting Investor Relations by email at investorrelations@dataio.com, by phone at (425) 881-6444, by fax at (425) 881-2917 or by writing to Data I/O investor relations, attention Joel Hatlen, 6645 185th Avenue NE, Suite 100, Redmond WA 98052. For future annual meetings, you may request separate materials, or request that we send only one set of materials to you if you are receiving multiple copies, by contacting Investor Relations as noted above.

SOLICITATION OF PROXIES

The proxy accompanying this Proxy Statement is solicited by the Board of Directors on behalf of the Company. Proxies may be solicited by officers, directors and regular supervisory and executive employees of Data I/O, none of whom will receive any additional compensation for their services. In addition, Data I/O may engage an outside proxy solicitation firm to render proxy solicitation services and, if so, will pay a fee for such services. Solicitations of proxies may be made personally, or by mail, telephone, telegraph or messenger. Data I/O will pay persons holding shares of Common Stock in their names or in the names of nominees, but not owning such shares beneficially, such as brokerage houses, banks and other fiduciaries, for the expense of forwarding soliciting materials to their principals. All such costs of solicitation of proxies will be paid by Data I/O.

Copies of our annual report on Form 10-K for the year ended December 31, 2020, are being mailed with this Proxy Statement to each shareholder of record. If you did not receive a copy of our annual report Form 10-K, you may obtain a copy (without exhibits) without charge by writing c/o Secretary, 6645 185th Avenue NE, Suite 100, Redmond, WA 98052 or by calling (425) 881-6444. Copies of the exhibits to our annual report on Form 10-K are available for a nominal fee or may be viewed at https://www.dataio.com/Company/Investor-Relations/Annual-Meeting.aspx or www.sec.gov in the EDGAR filing of our report.

By Order of the Board of Directors

/s/ Anthony Ambrose Anthony Ambrose President and Chief Executive Officer

Redmond, Washington April 5, 2021

DATA I/O CORPORATION 2000 STOCK COMPENSATION INCENTIVE PLAN

1. PURPOSES

1.1 The purpose of the Data I/O Corporation 2000 Stock Compensation Incentive Plan, as amended and restated, (the "2000 Plan") is to enhance the long-term shareholder value of Data I/O Corporation, a Washington corporation (the "Company"), by offering opportunities to employees, persons to whom offers of employment have been extended, directors, officers, consultants, agents, advisors and independent contractors of Data I/O and its Subsidiaries (as defined in Section 2) to participate in Data I/O's growth and success, and to encourage them to remain in the service of Data I/O and its Subsidiaries and to acquire and maintain stock ownership in Data I/O.

2. **DEFINITIONS**

For purposes of the 2000 Plan, the following terms shall be defined as set forth below:

2.1 Acquired Entities.

"Acquired Entities" has the meaning given in Section 6.2.

2.2 Acquisition Transaction.

"Acquisition Transaction" has the meaning given in Section 6.2.

2.3 Award.

"Award" means a grant made to a Participant pursuant to the 2000 Plan, including, without limitation, grants of Options, Stock Appreciation Rights, Stock Awards, Other Stock-Based Awards or any combination of the foregoing.

2.4 Board.

"Board" means the Board of Directors of Data I/O.

2.5 Cause.

"Cause" means dishonesty, fraud, misconduct, disclosure of confidential information, conviction of, or a plea of guilty or no contest to, a felony under the laws of the United States or any state thereof, habitual absence from work for reasons other than illness, intentional conduct which causes significant injury to Data I/O, habitual abuse of alcohol or a controlled substance, in each case as determined by the Plan Administrator, and its determination shall be conclusive and binding.

2.6 Change in Control.

"Change in Control" means (i) the consummation of a merger or consolidation of Data I/O with or into another entity or any other corporate reorganization, if more than 50% of the combined voting power of the continuing or surviving entity's securities outstanding immediately after such merger, consolidation or other reorganization is owned by persons who were not shareholders of Data I/O immediately prior to such merger, consolidation or other reorganization or (ii) the sale, transfer or other disposition of all or substantially all of Data I/O's assets. A transaction shall not constitute a Change in Control if its sole purpose is to change the state of Data I/O's incorporation or to create a holding company that will be owned in substantially the same proportions by the persons who held Data I/O's securities immediately before such transaction.

2.7 Code.

"Code" means the Internal Revenue Code of 1986, as amended from time to time.

2.8 Common Stock.

"Common Stock" means the common stock, no par value, of Data I/O.

2.9 Disability.

"Disability" means a medically determinable mental or physical impairment or condition of the Holder which is expected to result in death or which has lasted or is expected to last for a continuous period of twelve (12) months or more and which causes the Holder to be unable, in the opinion of the Plan Administrator on the basis of evidence acceptable to it, to perform his or her duties for Data I/O and, in the case of a determination of Disability for purposes of determining the exercise period for an Incentive Stock Option, to be engaged in any substantial gainful activity. Upon making a determination of Disability, the Plan Administrator shall, for purposes of the 2000 Plan, determine the date of the Holder's termination of employment, service or contractual relationship.

2.10 Exchange Act.

"Exchange Act" means the Securities Exchange Act of 1934, as amended.

2.11 Fair Market Value.

"Fair Market Value" shall be as established in good faith by the Plan Administrator or (a) if the Common Stock is listed on the NASDAQ Capital Market, the mean between the high and low selling prices for the Common Stock as reported by the NASDAQ Capital Market for a single trading day or (b) if the Common Stock is listed on the New York Stock Exchange or the American Stock Exchange, the mean between the high and low selling prices for the Common Stock as such prices are officially quoted in the composite tape of transactions on such exchange for a single trading day. If there is no such reported price for the Common Stock for the date in question, then such price on the last preceding date for which such price exists shall be determinative of Fair Market Value.

2.12 Grant Date.

"Grant Date" means the date the Plan Administrator adopted the granting resolution or a later date designated in a resolution of the Plan Administrator as the date an Award is to be granted.

2.13 Holder.

"Holder" means the Participant to whom an Award is granted or the personal representative of a Holder who has died.

2.14 Incentive Stock Option.

"Incentive Stock Option" means an Option to purchase Common Stock granted under Section 7 with the intention that it qualify as an "incentive stock option" as that term is defined in Section 422 of the Code.

2.15 Involuntary Termination.

"Involuntary Termination" means termination of the Holder's service to Data I/O (or the parent or subsidiary company employing such Holder) or the other party to the transaction constituting a Change in Control by reason of (i) the involuntary discharge of such Holder by Data I/O (or the parent or subsidiary company employing such Holder) or the other party to the transaction constituting a Change in Control for reasons other than Cause or (ii) the voluntary resignation of the Holder following (A) a change in such Holder's position with Data I/O (or its successor or the parent or subsidiary company that employs such Holder) or the other party to the transaction constituting a Change in Control that materially reduces such Holder's level of authority or responsibility or (B) a reduction in such Holder's compensation (including base salary, fringe benefits and participation in bonus or incentive programs based on corporate performance) by more than 20%.

2.16 Nonqualified Stock Option.

"Nonqualified Stock Option" means an Option to purchase Common Stock granted under Section 7 other than an Incentive Stock Option.

2.17 Option.

"Option" means the right to purchase Common Stock granted under Section 7.

2.18 Option Shares.

"Option Shares" means the shares of Common Stock issuable upon a Holder's exercise of an Option granted under the 2000 Plan.

2.19 Other Stock-Based Award.

"Other Stock-Based Award" means an Award granted under Section 11.

2.20 Participant.

"Participant" means an individual who is a Holder of an Award or, as the context may require, any employee, director (including directors who are not employees), officer, consultant, agent, advisor or independent contractor of Data I/O or a Subsidiary who has been designated by the Plan Administrator as eligible to participate in the 2000 Plan.

2.21 Plan Administrator.

"Plan Administrator" means the Board or any committee designated to administer the 2000 Plan under Section 3.1.

2.22 Qualifying Award.

"Qualifying Award" means an Option or an Award that is held by a person who had been an employee, director, consultant or agent to Data I/O for at least 180 days as of the effective date of a Change in Control.

2.23 Qualifying Shares.

"Qualifying Shares" means shares of Common Stock issued pursuant to a Qualifying Award which are subject to the right of Data I/O to repurchase some or all of such shares at the original purchase price (if any) upon termination of the Holder's services to Data I/O.

2.24 Restricted Stock.

"Restricted Stock" means shares of Common Stock granted pursuant to a Stock Award under Section 10, the rights of ownership of which are subject to restrictions prescribed by the Plan Administrator.

2.25 Securities Act.

"Securities Act" means the Securities Act of 1933, as amended.

2.26 Stock Appreciation Right.

"Stock Appreciation Right" means an Award granted under Section 9.

2.27 Stock Award.

"Stock Award" means an Award granted under Section 10.

2.28 Subsidiary.

"Subsidiary," except as expressly provided otherwise, means any entity that is directly or indirectly controlled by Data I/O or in which Data I/O has a significant ownership interest, as determined by the Plan Administrator, and any entity that may become a direct or indirect parent of Data I/O.

2.29 Unvested Portion.

"Unvested Portion" means the portion of a Qualifying Award or Qualifying Shares that is/are unvested as of the effective date of a Change in Control.

2.30 Vested Portion.

"Vested Portion" means the portion of a Qualifying Award or Qualifying Shares that is/are vested as of the effective date of a Change in Control.

3. ADMINISTRATION

3.1 Plan Administrator.

The 2000 Plan shall be administered by the Board or a committee or committees (which term includes subcommittees) appointed by, and consisting of two or more members of, the Board. Any such committee shall have the powers and authority vested in the Board hereunder (including the power and authority to interpret any provision of the 2000 Plan or of any Award). The Board, or any committee thereof appointed to administer the 2000 Plan, is referred to herein as the "Plan Administrator." If and so long as the Common Stock is registered under Section 12(b) or 12(g) of the Exchange Act, the Board shall consider in selecting the Plan Administrator and the membership of any committee acting as Plan Administrator for any persons subject or likely to become subject to Section 16 under the Exchange Act the provisions regarding (a) "outside directors" as contemplated by Section 162(m) of the Code and (b) "Non-Employee Directors" as contemplated by Rule 16b-3 under the Exchange Act. The Board or Plan Administrator may delegate the responsibility for administering the 2000 Plan with respect to designated classes of eligible Participants to one or more senior executive officers or committees thereof, the members of which need not be members of the Board, subject to such limitations as the Board deems appropriate. Committee members shall serve for such term as the Board may determine, subject to removal by the Board at any time.

3.2 Administration and Interpretation by the Plan Administrator.

Except for the terms, conditions and limitations explicitly set forth in the 2000 Plan, the Plan Administrator shall have exclusive authority, in its absolute discretion, to determine all matters relating to Awards under the 2000 Plan, including the selection of individuals to be granted Awards, the type of Awards, the number of shares of Common Stock subject to an Award, all terms, conditions, restrictions and limitations, if any, of an Award and the terms of any instrument that evidences the Award. The Plan Administrator shall also have exclusive authority to interpret the 2000 Plan and may from time to time adopt, change and rescind rules and regulations of general application for the 2000 Plan's administration. This authority shall include the sole authority to correct any defect, supply any omission or reconcile any inconsistency in this 2000 Plan and make all other determinations necessary or advisable for the administration of the 2000 Plan and do everything necessary or appropriate to administer the 2000 Plan. The Plan Administrator's interpretation of the 2000 Plan and its rules and regulations, and all actions taken and determinations made by the Plan Administrator pursuant to the 2000 Plan shall be conclusive and binding on all parties involved or affected. The Plan Administrator may delegate administrative duties to such of Data I/O's officers as it so determines.

4. STOCK SUBJECT TO THE 2000 PLAN

4.1 Authorized Number of Shares.

As of March 10, 2000, Data I/O had outstanding options with respect to 1,215,000 shares of Common Stock and 270,499 shares of Common Stock available for additional grants under the 2000 Plan and the Data I/O 1986 Employee Stock Option Plan ("1986 Plan"). Subject to adjustment from time to time as provided in Section 14.1, Awards of the authorized but unissued shares of Common Stock under the 1986 Plan, or shares of Common Stock that become available under the 1986 Plan as a result of the expiration or termination of options, may be granted under this 2000 Plan. Awards for an additional 300,000 shares of Common Stock shall also be available for issuance under the 2000 Plan. Shares issued under the 2000 Plan shall be drawn from authorized and unissued shares. See also Section 18 for 2000 Plan amendments.

4.2 Limitations.

- (a) Subject to adjustment from time to time as provided in Section 14.1, not more than 200,000 shares of Common Stock may be made subject to Awards under the 2000 Plan to any individual Participant in the aggregate in any one (1) calendar year, except that Data I/O may make additional one-time grants to newly hired Participants of up to 100,000 shares per such Participant; such limitation shall be applied in a manner consistent with the requirements of, and only to the extent required for compliance with, the exclusion from the limitation on deductibility of compensation under Section 162(m) of the Code.
- (b) Subject to adjustment from time to time as provided in Section 14.1, not more than 100,000 shares of Common Stock may be made subject to Awards to any non-employee director in the aggregate in any one calendar year.

4.3 Reuse of Shares.

Any shares of Common Stock that have been made subject to an Award that cease to be subject to the Award (other than by reason of exercise or payment of the Award to the extent it is exercised for or settled in shares) and any shares repurchased by Data I/O from a Holder upon exercise of a right of repurchase shall again be available for issuance in connection with future grants of Awards under the 2000 Plan; provided, however, that any such shares shall be counted in accordance with the requirements of Section 162(m) of the Code if and to the extent applicable. Shares that are subject to tandem Awards shall be counted only once. Also, upon a stock-for-stock exercise only the net number of shares will be deemed to have been used under this 2000 Plan.

5. ELIGIBILITY

Awards may be granted under the 2000 Plan to those officers, directors and key employees of Data I/O and its Subsidiaries as the Plan Administrator from time to time selects. Awards may also be made to consultants, agents, advisors and independent contractors who provide services to Data I/O and its Subsidiaries.

6. AWARDS

6.1 Form and Grant of Awards.

The Plan Administrator shall have the authority, in its sole discretion, to determine the type or types of Awards to be made under the 2000 Plan. Such Awards may include, but are not limited to, Incentive Stock Options, Nonqualified Stock Options, Stock Appreciation Rights, Stock Awards and Other Stock-Based Awards. Awards may be granted singly, in combination or in tandem so that the settlement or payment of one automatically reduces or cancels the other. Awards may also be made in combination or in tandem with, in replacement of, as alternatives to, or as the payment form for, grants or rights under any other employee or compensation plan of Data I/O.

6.2 Acquired Company Awards.

Notwithstanding anything in the 2000 Plan to the contrary, the Plan Administrator may grant Awards under the 2000 Plan in substitution for awards issued under other plans, or assume under the 2000 Plan awards issued under other plans, if the other plans are or were plans of other acquired entities ("Acquired Entities") (or the parent of the Acquired Entity) and the new Award is substituted, or the old Award is assumed, by reason of a merger, consolidation, acquisition of property or of stock, reorganization or liquidation (an "Acquisition Transaction"). If a written agreement pursuant to which an Acquisition Transaction is completed is approved by the Board and said agreement sets forth the terms and conditions of the substitution for or assumption of outstanding awards of the Acquired Entity, said terms and conditions shall be deemed to be the action of the Plan Administrator without any further action by the Plan Administrator, except as may be required for compliance with Rule 16b-3 under the Exchange Act, and the persons holding such Awards shall be deemed to be Participants and Holders.

7. AWARDS OF OPTIONS

7.1 Grant of Options.

The Plan Administrator is authorized under the 2000 Plan, in its sole discretion, to issue Options as Incentive Stock Options or as Nonqualified Stock Options, which shall be appropriately designated.

7.2 Option Exercise Price.

The exercise price for shares purchased under an Option shall be as determined by the Plan Administrator, but shall not be less than 100% of the Fair Market Value of the Common Stock on the Grant Date with respect to Incentive Stock Options.

7.3 Term of Options.

The term of each Option shall be as established by the Plan Administrator or, if not so established, shall be six (6) years from the Grant Date.

7.4 Exercise of Options.

The Plan Administrator shall establish and set forth in each instrument that evidences an Option the time at which or the installments in which the Option shall become exercisable, which provisions may be waived or modified by the Plan Administrator at any time. If not so established in the instrument evidencing the Option or otherwise set at the time of grant, the Option will be subject to the following: (a) 25% of the Option shall vest and become exercisable on each anniversary of the Grant Date such that the Option shall be fully vested on the fourth anniversary of the Grant Date; (b) in no event shall any additional Option Shares vest after termination of Holder's employment by or service to Data I/O; and (c) the Plan Administrator may waive or modify the foregoing schedule at any time.

To the extent that the right to purchase shares has accrued there under, an Option may be exercised from time to time by written notice to Data I/O, in accordance with procedures established by the Plan Administrator, setting forth the number of shares with respect to which the Option is being exercised and accompanied by payment in full as described in Section 7.5. An Option may not be exercised as to less than 100 shares at any one time (or the lesser number of remaining shares covered by the Option).

7.5 Payment of Exercise Price.

The exercise price for shares purchased under an Option shall be paid in full to Data I/O by delivery of consideration equal to the product of the Option exercise price and the number of shares purchased. Such consideration must be paid in cash or check (unless, at the time of exercise, the Plan Administrator determines not to accept a personal check), except that the Plan Administrator, in its sole discretion, may, either at the time the Option is granted or at any time before it is exercised and subject to such limitations as the Plan Administrator may determine, authorize payment in cash and/or one or more of the following alternative forms: (a) tendering (either actually or, if and so long as the Common Stock is registered under Section 12(b) or 12(g) of the Exchange Act, by attestation) Common Stock already owned by the Holder for at least six months (or any shorter period necessary to avoid a charge to Data I/O's earnings for financial reporting purposes) having a Fair Market Value on the day prior to the exercise date equal to the aggregate Option exercise price; (b) a promissory note delivered pursuant to Section 12; (c) if and so long as the Common Stock is registered under Section 12(b) or 12(g) of the Exchange Act, delivery of a properly executed exercise notice, together with irrevocable instructions, to (i) a third party designated by Data I/O to deliver promptly to Data I/O the aggregate amount of sale or loan proceeds to pay the Option exercise price and any withholding tax obligations that may arise in connection with the exercise and (ii) Data I/O to deliver the certificates for such purchased shares directly to such third party, all in accordance with the regulations of the Federal Reserve Board; (d) the net exercise of the Option as defined below; or (e) such other consideration as the Plan Administrator may permit.

In the case of a "net exercise" of an Option, the Company will not require a payment of the exercise price of the Option from the Holder but will reduce the number of shares of Common Stock issued upon the exercise by the largest number of whole shares that have a Fair Market Value that does not exceed the aggregate exercise price. With respect to any remaining balance of the aggregate exercise price, the Company will accept a cash payment from the Participant.

The number of shares of Common Stock underlying an Option will decrease following the exercise of such Option to the extent of (i) shares used to pay the exercise price of an Option under the "net exercise" feature, (ii) shares actually delivered to the Holder as a result of such exercise, and (iii) shares withheld for purposes of tax withholding.

7.6 Post-Termination Exercises.

The Plan Administrator may establish and set forth in each instrument that evidences an Option whether the Option will continue to be exercisable, and the terms and conditions of such exercise, if a Holder ceases to be employed by, or to provide services to, Data I/O or its Subsidiaries, which provisions may be waived or modified by the Plan Administrator at any time.

If not so established in the instrument evidencing the Option, the Option will be exercisable according to the following terms and conditions, which may be waived or modified by the Plan Administrator at any time.

In case of termination of the Holder's employment or services other than by reason of death or Cause, the Option shall be exercisable, to the extent of the number of shares purchasable by the Holder at the date of such termination, only (a) within one (1) year if the termination of the Holder's employment or services are coincident with Disability or (b) within three (3) months after the date the Holder ceases to be an employee, director, officer, consultant, agent, advisor or independent contractor of Data I/O or a Subsidiary if termination of the Holder's employment or services is for any reason other than death or Disability, but in no event later than the remaining term of the Option. Any Option exercisable at the time of the Holder's death may be exercised, to the extent of the number of shares purchasable by the Holder at the date of the Holder's death, by the personal representative of the Holder's estate entitled thereto at any time or from time to time within one (1) year after the date of death, but in no event later than the remaining term of the Option. In case of termination of the Holder's employment or services for Cause, the Option shall automatically terminate upon first discovery by Data I/O of any reason for such termination and the Holder shall have no right to purchase any Shares pursuant to such Option, unless the Plan Administrator determines otherwise. If a Holder's employment or services with Data I/O are suspended pending an investigation of whether the Holder shall be terminated for Cause, all the Holder's rights under any Option likewise shall be suspended during the period of investigation.

A transfer of employment or services between or among Data I/O and its Subsidiaries shall not be considered a termination of employment or services. The effect of a Company-approved leave of absence or short-term break in service on the terms and conditions of an Option shall be determined by the Plan Administrator, in its sole discretion.

8. INCENTIVE STOCK OPTION LIMITATIONS

To the extent required by Section 422 of the Code, Incentive Stock Options shall be subject to the following additional terms and conditions:

8.1 Dollar Limitation.

To the extent the aggregate Fair Market Value (determined as of the Grant Date) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time during any calendar year (under the 2000 Plan and all other stock option plans of Data I/O) exceeds \$100,000, such portion in excess of \$100,000 shall be treated as a Nonqualified Stock Option. In the event the Participant holds two (2) or more such Options that become exercisable for the first time in the same calendar year, such limitation shall be applied on the basis of the order in which such Options were granted.

8.2 10% Shareholders.

If a Participant owns more than 10% of the total voting power of all classes of Data I/O's stock, then the exercise price per share of an Incentive Stock Option shall not be less than 110% of the Fair Market Value of the Common Stock on the Grant Date and the Option term shall not exceed five (5) years. The determination of 10% ownership shall be made in accordance with Section 422 of the Code.

8.3 Eligible Employees.

Individuals who are not employees of Data I/O or one of its parent corporations or subsidiary corporations may not be granted Incentive Stock Options. For purposes of this Section 8.3, "parent corporation" and "subsidiary corporation" shall have the meanings attributed to those terms for purposes of Section 422 of the Code.

8.4 Term.

The term of an Incentive Stock Option shall not exceed ten (10) years.

8.5 Exercisability.

To qualify for Incentive Stock Option tax treatment, an Option designated as an Incentive Stock Option must be exercised within three (3) months after termination of employment for reasons other than death, except that, in the case of termination of employment due to total Disability, such Option must be exercised within one (1) year after such termination. Employment shall not be deemed to continue beyond the first 90 days of a leave of absence unless the Participant's reemployment rights are guaranteed by statute or contract.

8.6 Taxation of Incentive Stock Options.

In order to obtain certain tax benefits afforded to Incentive Stock Options under Section 422 of the Code, the Participant must hold the shares issued upon the exercise of an Incentive Stock Option for two (2) years after the Grant Date of the Incentive Stock Option and one (1) year from the date the shares are transferred to the Participant. A Participant may be subject to the alternative minimum tax at the time of exercise of an Incentive Stock Option. The Participant shall give Data I/O prompt notice of any disposition of shares acquired by the exercise of an Incentive Stock Option prior to the expiration of such holding periods.

8.7 Promissory Notes.

The amount of any promissory note delivered pursuant to Section 12 in connection with an Incentive Stock Option shall bear interest at a rate specified by the Plan Administrator but in no case less than the rate required to avoid imputation of interest (taking into account any exceptions to the imputed interest rules) for federal income tax purposes.

8.8 Incorporation of Other Provisions.

With respect to Incentive Stock Options, if this 2000 Plan does not contain any provision required to be included herein under Section 422 of the Code, such provision shall be deemed to be incorporated herein with the same force and effect as if such provision had been set out in full herein; provided, however, that to the extent any Option that is intended to qualify as an Incentive Stock Option cannot so qualify, the Option, to that extent, shall be deemed to be a Nonqualified Stock Option for all purposes of this 2000 Plan.

9. STOCK APPRECIATION RIGHTS

9.1 Grant of Stock Appreciation Rights.

The Plan Administrator may grant a Stock Appreciation Right separately or in tandem with a related Option.

9.2 Tandem Stock Appreciation Rights.

A Stock Appreciation Right granted in tandem with a related Option will give the Holder the right to surrender to Data I/O all or a portion of the related Option and to receive an appreciation distribution (in shares of Common Stock or cash or any combination of shares and cash, as the Plan Administrator, in its sole discretion, shall determine at any time) in an amount equal to the excess of the Fair Market Value for the date the Stock Appreciation Right is exercised over the exercise price per share of the right, which shall be the same as the exercise price of the related Option. A tandem Stock Appreciation Right will have the same other terms and provisions as the related Option. Upon and to the extent a tandem Stock Appreciation Right is exercised, the related Option will terminate.

9.3 Stand-Alone Stock Appreciation Rights.

A Stock Appreciation Right granted separately and not in tandem with an Option will give the Holder the right to receive an appreciation distribution in an amount equal to the excess of the Fair Market Value for the date the Stock Appreciation Right is exercised over the exercise price per share of the right. A stand-alone Stock Appreciation Right will have such terms as the Plan Administrator may determine, except that the term of the right, if not otherwise established by the Plan Administrator, shall be ten (10) years from the Grant Date.

9.4 Exercise of Stock Appreciation Rights.

Unless otherwise provided by the Plan Administrator in the instrument that evidences the Stock Appreciation Right, the provisions of Section 7.6 relating to the termination of a Holder's employment or services shall apply equally, to the extent applicable, to the Holder of a Stock Appreciation Right.

10. STOCK AWARDS

10.1 Grant of Stock Awards.

The Plan Administrator is authorized to make Awards of Common Stock or of rights to receive shares of Common Stock to Participants on such terms and conditions and subject to such restrictions, if any (which may be based on continuous service with Data I/O or the achievement of performance goals related to (i) sales, gross margin, operating profits or profits, (ii) growth in sales, gross margin, operating profits or profits, (iii) return ratios related to sales, gross margin, operating profits or profits, (iv) cash flow, (v) asset management (including inventory management), or (vi) total shareholder return, where such goals may be stated in absolute terms or relative to comparison companies), as the Plan Administrator shall determine, in its sole discretion, which terms, conditions and restrictions shall be set forth in the instrument evidencing the Award. The terms, conditions and restrictions that the Plan Administrator shall have the power to determine shall include, without limitation, the manner in which shares subject to Stock Awards are held during the periods they are subject to restrictions and the circumstances under which forfeiture of Restricted Stock shall occur by reason of termination of the Holder's services or upon the occurrence of other events.

10.2 Issuance of Shares.

Upon the satisfaction of any terms, conditions and restrictions prescribed with respect to a Stock Award, or upon the Holder's release from any terms, conditions and restrictions of a Stock Award, as determined by the Plan Administrator, Data I/O shall transfer, as soon as practicable, to the Holder or, in the case of the Holder's death, to the personal representative of the Holder's estate or as the appropriate court directs, the appropriate number of shares of Common Stock covered by the Award.

10.3 Waiver of Restrictions.

Notwithstanding any other provisions of the 2000 Plan, the Plan Administrator may, in its sole discretion, waive the forfeiture period and any other terms, conditions or restrictions on any Restricted Stock under such circumstances and subject to such terms and conditions as the Plan Administrator shall deem appropriate.

11. OTHER STOCK-BASED AWARDS

The Plan Administrator may grant other Awards under the 2000 Plan pursuant to which shares of Common Stock (which may, but need not, be shares of Restricted Stock pursuant to Section 10) are or may in the future be acquired, or Awards denominated in stock units, including ones valued using measures other than market value. Such Other Stock-Based Awards may be granted alone or in addition to or in tandem with any Award of any type granted under the 2000 Plan and must be consistent with the 2000 Plan's purpose.

12. LOANS, INSTALLMENT PAYMENTS AND LOAN GUARANTEES

To assist a Holder (excluding a Holder who is an officer or director of Data I/O) in acquiring shares of Common Stock pursuant to an Award granted under the 2000 Plan, the Plan Administrator, in its sole discretion, may authorize, either at the Grant Date or at any time before the acquisition of Common Stock pursuant to the Award, (a) the extension of a loan to the Holder by Data I/O, (b) the payment by the Holder of the purchase price, if any, of the Common Stock in installments, or (c) the guarantee by Data I/O of a loan obtained by the grantee from a third party. The terms of any loans, installment payments or loan guarantees, including the interest rate and terms of and security for repayment, will be subject to the Plan Administrator's discretion; provided, however, that repayment of any Company loan to the Holder shall be secured by delivery of a full-recourse promissory note for the loan amount executed by the Holder, together with any other form of security determined by the Plan Administrator. The maximum credit available is the purchase price, if any, of the Common Stock acquired, plus the maximum federal and state income and employment tax liability that may be incurred in connection with the acquisition.

13. ASSIGNABILITY

Except as otherwise specified or approved by the Plan Administrator at the time of grant of an Award or any time prior to its exercise, no Award granted under the 2000 Plan may be assigned, pledged or transferred by the Holder other than by will or by the laws of descent and distribution, and during the Holder's lifetime, such Awards may be exercised only by the Holder. Notwithstanding the foregoing, and to the extent permitted by Section 422 of the Code, the Plan Administrator, in its sole discretion, may permit such assignment, transfer and exercise ability and may permit a Holder of such Awards to designate a beneficiary who may exercise the Award or receive compensation under the Award after the Holder's death; provided, however, that (i) any Award so assigned or transferred shall be subject to all the same terms and conditions contained in the instrument evidencing the Award, (ii) the original Holder

shall remain subject to withholding taxes upon exercise, (iii) any subsequent transfer of an Award shall be prohibited and (iv) the events of termination of employment or contractual relationship set forth in subsection 7.6 shall continue to apply with respect to the original transferor-Holder.

14. ADJUSTMENTS

14.1 Adjustment of Shares.

In the event that, at any time or from time to time, a stock dividend, stock split, spin-off, combination or exchange of shares, recapitalization, merger, consolidation, distribution to shareholders other than a normal cash dividend, or other change in Data I/O's corporate or capital structure results in (a) the outstanding shares, or any securities exchanged therefor or received in their place, being exchanged for a different number or class of securities of Data I/O or of any other corporation or (b) new, different or additional securities of Data I/O or of any other corporation being received by the holders of shares of Common Stock of Data I/O, then the Plan Administrator, in its sole discretion, shall make such equitable adjustments as it shall deem appropriate in the circumstances in (i) the maximum number and class of securities subject to the 2000 Plan as set forth in Section 4.1, (ii) the maximum number and class of securities that may be made subject to Awards to any individual Participant as set forth in Section 4.2, and (iii) the number and class of securities that are subject to any outstanding Award and the per share price of such securities, without any change in the aggregate price to be paid therefor. The determination by the Plan Administrator as to the terms of any of the foregoing adjustments shall be conclusive and binding. Repricing of stock option exercise prices shall, in accordance with NASDAQ rules, require shareholder approval.

14.2 Dissolution, Liquidation or Change in Control Transactions.

- (a) In the event of the proposed dissolution or liquidation of Data I/O, Data I/O shall notify each Holder at least fifteen (15) days prior to such proposed action. To the extent not previously exercised, all Awards will terminate immediately prior to the consummation of such proposed action.
- (b) Unless the applicable agreement representing an Award provides otherwise, or unless the Plan Administrator determines otherwise in its sole and absolute discretion in connection with any Change in Control, a Qualifying Award which is not vested or is not exercisable in full shall become exercisable or vested in connection with a Change in Control which becomes effective before the Holder's service to Data I/O terminates as follows:
- (i) If the Qualifying Award remains outstanding following the Change in Control, is assumed by the surviving entity or its parent, or the surviving entity or its parent substitutes awards with substantially the same terms for such Qualifying Award, the vesting and exercisability of the Qualifying Award shall be accelerated to the extent of 25% of the Unvested Portion thereof, and the remaining 75% of the Unvested Portion of such Qualifying Award shall vest in accordance with the vesting schedule set forth in the applicable Award agreement.
- (ii) If the Qualifying Award remains outstanding following the Change in Control, is assumed by the surviving entity or its parent, or the surviving entity or its parent substitutes options with substantially the same terms for such Qualifying Award and if the Holder thereof is subject to an Involuntary Termination within 180 days following such Change in Control, then all Awards held by such Holder (or options issued in substitution thereof) shall become vested or exercisable in full, whether or not the vesting requirements set forth in the Award agreement have been satisfied, for a period of 90 days commencing on the effective date of such Holder's Involuntary Termination, or if shorter, the remaining term of the Award.
- (iii) If a Qualifying Award does not remain outstanding, and either such Qualifying Award is not assumed by the surviving entity or its parent, or the surviving entity or its parent does not substitute awards with substantially the same terms for such Qualifying Award, such Qualifying Award shall become vested or exercisable in full, whether or not the vesting requirements set forth in the Award agreement have been satisfied, for a period prior to the effective date of such Change in Control of a duration specified by the Plan Administrator, and thereafter the Award shall terminate.
- (c) Unless the applicable agreement representing an Award provides otherwise, or unless the Plan Administrator determines otherwise in its sole and absolute discretion in connection with any Change in Control, the vesting of Qualifying Shares shall be accelerated, and Data I/O's repurchase right with respect to such shares shall lapse, in connection with a Change in Control which becomes effective before such Holder's service to Data I/O terminates as follows:

- (i) If Qualifying Awards were outstanding at the effective time of the Change in Control and they are partially accelerated pursuant to Subsection (b)(i) above or if there were no Qualifying Awards outstanding at the effective time of the Change in Control, the vesting of all Qualifying Shares shall be accelerated to the extent of 25% of the Unvested Portion thereof, and the remaining 75% of the Unvested Portion of such Qualifying Shares shall vest in accordance with the vesting schedule set forth in the applicable Award agreement.
- (ii) If the preceding clause (i) applied and if a Holder of Qualifying Shares is subject to an Involuntary Termination within 180 days following the same Change in Control, then all Qualifying Shares held by such Holder (or shares issued in substitution thereof) shall become vested in full, whether or not the vesting requirements set forth in the applicable Award agreement have been satisfied.
- (iii) If Qualifying Awards were outstanding at the effective time of the Change in Control and they are accelerated in full pursuant to Subsection (b)(iii) above or otherwise, the vesting of all Qualifying Shares shall be accelerated in full, and Data I/O's repurchase right with respect to all such shares shall lapse in full, whether or not the vesting requirements set forth in the applicable Award agreement have been satisfied.

14.3 Further Adjustment of Awards.

Subject to the preceding Section 14.2, the Plan Administrator shall have the discretion, exercisable at any time before a sale, merger, consolidation, reorganization, dissolution, liquidation or Change in Control of Data I/O, as defined by the Plan Administrator, to take such further action as it determines to be necessary or advisable, and fair and equitable to Participants, with respect to Awards. Such authorized action may include (but shall not be limited to) establishing, amending or waiving the type, terms, conditions or duration of, or restrictions on, Awards so as to provide for earlier, later, extended or additional time for exercise, payment or settlement or lifting restrictions, differing methods for calculating payments or settlements, alternate forms and amounts of payments and settlements and other modifications, and the Plan Administrator may take such actions with respect to all Participants, to certain categories of Participants or only to individual Participants. The Plan Administrator may take such actions before or after granting Awards to which the action relates and before or after any public announcement with respect to such sale, merger, consolidation, reorganization, dissolution, liquidation or Change in Control that is the reason for such action. Without limiting the generality of the foregoing, if Data I/O is a party to a merger or consolidation, outstanding Awards shall be subject to the agreement of merger or consolidation. Such agreement, without the Holder's consent, may provide for:

- (a) the continuation of such outstanding Award by Data I/O (if Data I/O is the surviving corporation);
- (b) the assumption of the 2000 Plan and some or all outstanding Awards by the surviving corporation or its parent;
- (c) the substitution by the surviving corporation or its parent of Awards with substantially the same terms for such outstanding Awards; or
 - (d) the cancellation of such outstanding Awards with or without payment of any consideration.

14.4 Limitations.

The grant of Awards will in no way affect Data I/O's right to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

14.5 Fractional Shares.

In the event of any adjustment in the number of shares covered by any Award, any fractional shares resulting from such adjustment shall be disregarded and each such Award shall cover only the number of full shares resulting from such adjustment.

15. WITHHOLDING

Data I/O may require the Holder to pay to Data I/O in cash the amount of any withholding taxes that Data I/O is required to withhold with respect to the grant, exercise, payment or settlement of any Award. Data I/O shall have the right to withhold from any Award or any shares of Common Stock issuable pursuant to an Award or from any cash amounts otherwise due or to become due from Data I/O to the Participant an amount equal to such taxes. Data I/O may also deduct from any Award any other amounts due from the Participant to Data I/O or a Subsidiary.

16. AMENDMENT AND TERMINATION OF 2000 PLAN

16.1 Amendment of 2000 Plan.

The 2000 Plan may be amended by the Board in such respects as it shall deem advisable including, without limitation, such modifications or amendments as are necessary to maintain compliance with applicable statutes, rules or regulations; however, to the extent required for compliance with Section 422 of the Code or any applicable law or regulation, shareholder approval will be required for any amendment that will increase the aggregate number of shares as to which Incentive Stock Options may be granted or change the class of persons eligible to participate. Amendments made to the 2000 Plan which would constitute "modifications" to Incentive Stock Options outstanding on the date of such Amendments shall not be applicable to such outstanding Incentive Stock Options but shall have prospective effect only. The Board may condition the effectiveness of any amendment on the receipt of shareholder approval at such time and in such manner as the Board may consider necessary for Data I/O to comply with or to avail Data I/O, the Holders or both of the benefits of any securities, tax, market listing or other administrative or regulatory requirement which the Board determines to be desirable. Whenever shareholder approval is sought, and unless required otherwise by applicable law or exchange requirements, the proposed action shall require the affirmative vote of holders of a majority of the shares present, entitled to vote and voting on the matter without including abstentions or broker non-votes in the denominator.

16.2 Termination Of 2000 Plan.

Data I/O's shareholders or the Board may suspend or terminate the 2000 Plan at any time. The 2000 Plan will have no fixed expiration date; provided, however, that no Incentive Stock Options may be granted more than ten (10) years after the earlier of the 2000 Plan's adoption by the Board or approval by the shareholders.

17. GENERAL

17.1 Award Agreements.

Awards granted under the 2000 Plan shall be evidenced by a written agreement which shall contain such terms, conditions, limitations and restrictions as the Plan Administrator shall deem advisable and which are not inconsistent with the 2000 Plan.

17.2 Continued Employment or Services; Rights In Awards.

None of the 2000 Plan, participation in the 2000 Plan as a Participant or any action of the Plan Administrator taken under the 2000 Plan shall be construed as giving any Participant or employee of Data I/O any right to be retained in the employ of Data I/O or limit Data I/O's right to terminate the employment or services of the Participant.

17.3 Registration; Certificates For Shares.

Data I/O shall be under no obligation to any Participant to register for offering or resale or to qualify for exemption under the Securities Act, or to register or qualify under state securities laws, any shares of Common Stock, security or interest in a security paid or issued under, or created by, the 2000 Plan, or to continue in effect any such registrations or qualifications if made. Data I/O may issue certificates for shares with such legends and subject to such restrictions on transfer and stop-transfer instructions as counsel for Data I/O deems necessary or desirable for compliance by Data I/O with federal and state securities laws.

Inability of Data I/O to obtain, from any regulatory body having jurisdiction, the authority deemed by Data I/O's counsel to be necessary for the lawful issuance and sale of any shares hereunder or the unavailability of an exemption from registration for the issuance and sale of any shares hereunder shall relieve Data I/O of any liability in respect of the non-issuance or sale of such shares as to which such requisite authority shall not have been obtained.

17.4 No Rights As A Shareholder.

No Option, Stock Appreciation Right or Other Stock-Based Award shall entitle the Holder to any cash dividend, voting or other right of a shareholder unless and until the date of issuance under the 2000 Plan of the shares that are the subject of such Award, free of all applicable restrictions.

17.5 Compliance With Laws And Regulations.

In interpreting and applying the provisions of the 2000 Plan, any Option granted as an Incentive Stock Option pursuant to the 2000 Plan shall, to the extent permitted by law, be construed as an "incentive stock option" within the meaning of Section 422 of the Code.

17.6 No Trust Or Fund.

The 2000 Plan is intended to constitute an "unfunded" plan. Nothing contained herein shall require Data I/O to segregate any monies or other property, or shares of Common Stock, or to create any trusts, or to make any special deposits for any immediate or deferred amounts payable to any Participant, and no Participant shall have any rights that are greater than those of a general unsecured creditor of Data I/O.

17.7 Severability.

If any provision of the 2000 Plan or any Award is determined to be invalid, illegal or unenforceable in any jurisdiction, or as to any person, or would disqualify the 2000 Plan or any Award under any law deemed applicable by the Plan Administrator, such provision shall be construed or deemed amended to conform to applicable laws, or, if it cannot be so construed or deemed amended without, in the Plan Administrator's determination, materially altering the intent of the 2000 Plan or the Award, such provision shall be stricken as to such jurisdiction, person or Award, and the remainder of the 2000 Plan and any such Award shall remain in full force and effect.

17.8 Restrictions.

- (a) Excise tax gross-ups are not allowed.
- (b) Awards are not transferable to 3rd party financial institutions.

18. EFFECTIVE DATE

The 2000 Plan's effective date is the date on which it is adopted by the Board, so long as it is approved by Data I/O's shareholders at any time within twelve (12) months of such adoption.

The original 2000 Plan was adopted by the Board on February 28, 2000 and approved by Data I/O's shareholders in May 2000. The 2000 Plan was amended and approved by the Board and Data I/O's shareholders in: 2002 to add an additional 200,000 shares; 2004, to add an additional 300,000 shares; 2006, to add an additional 300,000 shares; 2011, to add an additional 300,000 shares; 2012, to add an additional 300,000 shares of Common Stock to be reserved for issuance under the 2000 Plan On February 24, 2021, the Board amended and restated the 2000 Plan to add an additional 700,000 shares of Common Stock to be reserved for issuance under the 2000 Plan.

Board of Directors:

<u>Anthony Ambrose</u> (2012) President/CEO

<u>Douglas W. Brown</u> (2011) Formerly Executive Chairman All Star Directories, Inc. (Web Services Software)

Mark J. Gallenberger (2013) Executive Vice President/CFO Cerence, Inc. (Voice A.I. Solutions)

Alan B. Howe (2013) *
Managing Partner
Broadband Initiatives, LLC
(Corporate Advisory & Consulting)
*Will not stand for reelection
at the 2021 Annual Meeting

Sally A. Washlow (2020)
Practice Lead
Lee Hecht Harrison LLC
(Management Consulting)

The calendar year in () indicates when the individuals became directors of Data I/O.

Corporate Officers:

Anthony Ambrose President/CEO

Joel S. Hatlen Vice President Chief Operating Officer Chief Financial Officer Secretary/Treasurer

Rajeev Gulati Vice President Chief Technology Officer

Michael Tidwell
Vice President Marketing and
Business Development

Corporate Offices:

Data I/O Corporation 6645 185th Ave NE Suite 100 Redmond, WA 98052

Sales and Service Offices:

China

Data I/O Electronics (Shanghai) Co. Ltd 6F, Building 3, JuXin Park 188 Ping Fu Road Shanghai, China PRC 200231

Germany
Data I/O GmbH
Am Haag 10
82166 Graefelfing

Legal Counsel:

Dorsey & Whitney LLP Columbia Center 701 5th Ave, #6100 Seattle, WA 98101

Auditors:

Grant Thornton LLP 520 Pike Street, #2800 Seattle, WA 98101-2310

Investor Relations:

Shareholders of Data I/O Corporation who would like information about the Company are invited to contact:

Darrow Associates, Inc. Jordan Darrow (512) 551-9296 jdarrow@darrowir.com

Joel Hatlen
Vice President, Chief Operating Officer
& Chief Financial Officer
6645 185th Ave NE, Suite 100
Redmond, WA 98052
(425) 881-6444
investorrelations@dataio.com

Form 10-K:

To obtain a copy of the Company's Annual Report on Form 10-K, filed with the Securities and Exchange Commission, go to our website at https://www.dataio.com/Company/Investor-Relations/Financial-Reports.aspx or contact Joel Hatlen, Vice President, Chief Operating Officer & Chief Financial Officer 6645 185th Ave NE, Suite 100 Redmond, WA 98052.

Shareholders Meeting:

The 2021 Annual Meeting of Shareholders will be held on Thursday, May 20, 2021 at 10:00 a.m. Pacific Time at the Company's headquarters:

Data I/O Corporation 6645 185th Ave NE, Suite 100 Redmond, Washington 98052

Shareholder Information:

Shareholders needing information relating to their shareholdings in Data I/O should contact the Company's Transfer Agent and Registrar at the mailing address, telephone number or web address below.

Transfer Agent and Registrar:

Computershare P.O. Box 505000 Louisville, KY 40233 (888) 540-9882

Overnight correspondence
Computershare
462 South 4th Street, Suite 1600
Louisville, KY 40202

<u>Shareholder website:</u> <u>www.computershare.com/investor</u>

<u>Shareholder online inquiries:</u>
https://www-us.computershare.com/investor/Contact

Exchange Listing:

Stock Symbol: DAIO NASDAQ





Since 1972 Data I/O has developed innovative solutions to enable the design and manufacture of electronic products for automotive, Internet-of-Things, medical, wireless, consumer electronics, industrial controls and other electronic devices. Today, our customers use Data I/O security deployment and programming solutions to reliably, securely, and cost-effectively bring innovative new products to life. These solutions are backed by a global network of Data I/O support and service professionals, ensuring success for our customers.

Redmond, WA USA | Graefelfing, Germany | Shanghai, China



