

DATA I/O CORP  
Form 10-K  
March 28, 2013

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

(Mark One)

**FORM 10-K**

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

For the fiscal year ended **December 31, 2012**

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: **0-10394**

**DATA I/O CORPORATION**  
(Exact name of registrant as specified in its charter)

Washington  
(State or other jurisdiction of incorporation)

91-0864123  
(I.R.S. Employer Identification No.)

**6464 185<sup>th</sup> Ave NE, Suite 101, Redmond, Washington, 98052**  
**(425) 881-6444**

(Address, including zip code, of registrant's principle executive offices and telephone number, including area code)

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

Title of each class	Name of each exchange on which registered
Common Stock (No Par Value)	Nasdaq Capital Market

Securities registered pursuant to Section 12(g) of the Act

None

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

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

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

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

Aggregate market value of voting and non-voting common equity held

by non-affiliates on the registrant as of June 30, 2012:

\$20,878,108

Shares of Common Stock, no par value, outstanding as of March 20, 2013:

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement relating to its May 21, 2013 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, 2012**

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## PART I

### **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 the global market leader for advanced programming and intellectual property management solutions used in the manufacturing of flash, microcontrollers, and flash-memory-based intelligent devices. Data I/O® designs, manufactures and sells programming systems for electronic device manufacturers, specifically targeting high growth areas such as high-volume users of flash memory and microcontrollers. Virtually every electronic product today incorporates one or more programmable semiconductor devices that contain data and operating instructions essential for the proper operation of the product.

Our mission is to deliver high-value systems, software and services to the rapidly expanding programmable semiconductor market by providing a software-rich programming platform for content delivery. These programmable devices are used in products such as smart phones, HDTV, MP3 players, gaming systems and automobile electronics. These solutions, some of which include intellectual property management, secure content management and process control capabilities, enable us to address the demanding requirements for the electronic device market, where applications and intellectual property 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 wireless and consumer electronics and automotive electronics, and their 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.

#### **Industry Background**

We enable companies to improve productivity and reduce costs by providing device programming solutions that allow our customers to take intellectual property (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 ranging from cell phones to automobiles, utilizing programmable electronic devices, purchase these solutions from us. The trends of increasing device densities and customers increasing their software content file sizes, combined with the increasing numbers of intelligent devices such as smartphones and tablets, are driving demand for our solutions.

Our automated programming systems integrate both programming and handling functions into a single product solution. Quality conscious customers, particularly those in the field of high-volume manufacturing and programming, continue to drive this portion of our business.

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, the focus has shifted in many cases from the number of devices to the number of bits per device to be programmed.

## **Products**

In order 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 products are positioned and viewed as the “gold standard” for advanced programming equipment and intellectual property management solutions. Our RoadRunner3 with Factory Integration Software received the Circuits Assembly NPI Award in February of 2012.

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 main categories of automated programming systems: off-line and in-line. Our common programming platform, FlashCORE™, and our universal





job setup tool, Tasklink™ for Windows®, are available in each family of our automated programming systems and FlashPAK™. In addition, 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 under annual subscription contracts. We experienced a smaller percentage of equipment sales compared to total sales in 2012 which we believe was primarily due to weakness in capital spending.

#### Sales Percentage of Total Sales Breakdown by Type

Sales Type	2012	2011	Drivers
Equipment Sales	52%	61%	Capacity, Process improvement, Technology
Adapter Sales	31%	27%	Capacity utilization, New customer products
Software and Maintenance Sales	17%	12%	Installed base, Added capabilities
<b>Total</b>	<b>100%</b>	<b>100%</b>	

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

Products	Key Features	Customer Benefits
RoadRunner and RoadRunner3 Series:  In-line,  (Automated)	<ul style="list-style-type: none"> <li>• Just-in-time in-line programming</li> <li>• Direct integration with placement machine supporting SIPLACE, Fuji NXT, Panasonic, Assembleon, Universal and MYDATA Parallel Programming</li> <li>• Factory Integration Software</li> <li>• List Selling Price ("List") of \$79,900 to \$127,100</li> <li>• Fast program and verify speeds</li> <li>• Up to 48 programming sites</li> <li>• Supports multiple media types</li> <li>• Factory Integration Software</li> </ul>	<ul style="list-style-type: none"> <li>• Dramatic reduction in inventory carrying and rework costs</li> <li>• "Zero" footprint</li> <li>• Rapid return on investment ("ROI") typically realized in a matter of months</li> <li>• Integration with factory systems</li> <li>• High throughput for high density Flash programming</li> <li>• High flexibility with respect to I/O options (tube, tray, tape), marking/labeling and vision for coplanarity inspection</li> </ul>
PS Series: Off-line Medium/High Volume, High Mix  (Automated)		

<p>FLX500 &amp; FLXHD: Off-line, Moderate Volume  (Automated)</p>	<ul style="list-style-type: none"> <li>• List of \$185,000 to \$628,000</li> <li>• Fast changeover times</li> <li>• Self-learning “plug-and-play” operation</li> <li>• Language-independent graphic user interface</li> <li>• FLXHD supports 40 duplication sites</li> </ul>	<ul style="list-style-type: none"> <li>• Affordable automation</li> <li>• Modular, easy to configure</li> <li>• Intuitive, easy to use graphical user interface</li> <li>• Small footprint</li> </ul>
<p>FlashPAK II/III: Off-line, Low Mix, Low Volume  (Non-Automated)</p>	<ul style="list-style-type: none"> <li>• List of \$79,900 to \$119,880</li> <li>• Scalability</li> <li>• Network control via Ethernet</li> <li>• Stand-alone operation or PC compatible</li> <li>• Parallel programming</li> </ul>	<ul style="list-style-type: none"> <li>• Validate designs before moving down the firmware supply chain</li> <li>• Unmatched ease of use in manual production systems</li> </ul>
<p>Sprint/Unifamily: Off-line, Low Volume and Engineering  (Non-Automated)</p>	<ul style="list-style-type: none"> <li>• List of \$9,500</li> <li>• Breadth of device coverage</li> <li>• List of \$675 to \$32,400</li> </ul>	<ul style="list-style-type: none"> <li>• Universal programmer</li> </ul>

## Customers

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:

	<b>Customer Types</b>				
	<b>Wireless &amp; Consumer Electronics</b>	<b>OEMs Automotive Electronics</b>	<b>Industrial &amp; Process Control Electronics</b>	<b>EMS Contract Manufacturers</b>	<b>Programming Centers</b>
<b>Notable end customers</b>	LG, Motorola, RIM, Sony, HTC, Microsoft	TRW, Lear, Delphi, Bosch, Blaupunkt, Continental, Johnson Controls	Allen-Bradley, Square D, ABB, Trane, Grundig, Danfoss, Philips	Pegatron, Flextronics, Celestica, Jabil, Wistron, Sanmina SCI, Foxconn	Arrow, Avnet, BTV, MSC, HTV, CPS, EPS, Elmittech
<b>Business drivers</b>	GPS, Digital Rights Management, security, flash media, video, LTE/4G networks, applications, features & functionality of converged devices	Visteon Safety, navigation and infotainment devices, drive-by-wire, increased electronic content	Higher functionality driven by increasing electronic content	Acquisition of OEM factories, production contract wins	Value-added services, logistics
<b>Programming equipment drivers</b>	Rollout of new products that incorporate higher functionality, more memory and new technology, e.g. e-MMC	Process improvement and simplification, new product rollouts, growing file sizes, and quality control	Process improvement and simplification as well as new product rollouts	New contracts from OEMs, programming solutions specified by OEMs	Capacity utilization of their installed base of equipment
<b>Buying criteria</b>	Throughput, technical capability to support evolving technology, global support, intellectual property protection,	Quality, reliability, configuration control, traceability, global support, intellectual property protection	Quality, reliability, configuration control, traceability	Lowest equipment procurement cost, global support	Flexibility, lowest life-cycle cost-per programmed-part, low changeover time; use of multiple vendors provides negotiating leverage

robust  
algorithms

Our solutions address the programming of devices, a large, growing market, both in terms of devices and bits programmed. According to World Semiconductor Trade Statistics ("WSTS") in February 2013, semiconductor device revenues experienced a 3.2% decline for the full year 2012 compared to 2011 primarily due to a challenging global economy and a slowdown in the Chinese market. For 2013, 4.5% semiconductor revenue growth is forecast according to WSTS. Semiconductor Industry Association ("SIA"), which represents U.S. semiconductor companies, said their recent study showed revenues declined globally by 2.7% in 2012 and the market is poised to rebound in 2013. Markets that are expected to be key growth drivers include smart phones, tablet computers, e-readers, portable media players, set top boxes, televisions, automotive electronics, and new household appliances filled with electronics. The demand for more electronics is a trend, and this growth is driving the semiconductor industry.

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, driving demand for our products or alternative programming methods.

*Addressing High Growth, High Volume Markets.* Our device programming solutions currently target two high growth, high volume markets: flash for mobile devices and microcontrollers for automotive electronics.

#### Growth drivers of flash in Mobile Devices

- Flash unit volume experiencing explosive growth
- Increasing usage of NAND, especially managed NAND like e-MMC
- Densities continue to increase, driving the need for more advanced and secure programming capabilities
- Higher densities driving new usage models such as tablet computers
- The shift to smart phones like iPhone, Android and new low cost smart phones

#### Growth drivers of microcontrollers and flash in Automotive

- Consumers desire advanced car features requiring higher levels of sophistication including infotainment products (audio, radio, satellite, navigation and wireless connectivity) as well as increased safety features and optimized engine functionality
- ~60 microcontrollers per vehicle
- 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

Increasingly, OEMs in consumer electronics are outsourcing their device programming needs to EMS contract manufacturers to reduce capital expense and maximize profit margins. At the same time, these OEMs are also increasing their proprietary software content to accelerate new product introductions with more feature-rich, application-specific versions. While the outsourcing of manufacturing processes is essential to maximizing an OEM's profit margin, maintaining the integrity and control of the software, the OEM's core intellectual property, is increasingly complex in this outsourced environment, especially given the global nature of the manufacturing supply chain. Data I/O, with its comprehensive programming solution, provides OEMs with the ability to manage, monitor, audit and secure the software supply chain.

During 2012, we sold products to over 500 customers throughout the world. The following customers represented greater than 10% of sales in the applicable year:

2012 Data Copy Limited, a distributor in China, accounted for approximately 11% of 2012 net sales.

2011 Data Copy Limited, a distributor in China, accounted for approximately 11% of 2011 net sales.

2010 No customer accounted for greater than 10% of 2010 net sales.

The following customers represented greater than 10% of our consolidated accounts receivable balance as of December 31 of the applicable year:

2012 Three customers, Data Copy Limited, Delphi and Jabil each accounted for more than 10% of our consolidated accounts receivable.

2011 Panasonic accounted for approximately 10% of our consolidated accounts receivable.

2010 No customers accounted for more than 10% of our consolidated accounts receivable.

## **Geographic Markets and Distribution**

We market and sell our products through a combination of direct sales, internal telesales and indirect sales representatives and distributors. 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 United States for 2012, 2011 and 2010 were \$2,835,000, \$2,724,000 and \$3,145,000, respectively.

### International Sales

International sales represented approximately 83%, 90%, and 88% of net sales in 2012, 2011 and 2010, respectively. We make foreign sales through our wholly-owned subsidiaries in Germany and China, as well as through independent distributors and sales representatives located in 46 other countries. Our independent foreign distributors purchase our products in U.S. Dollars for resale and we 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 shipments made directly to the customer by us.

Net international sales for 2012, 2011 and 2010 were \$14,250,000, \$23,942,000 and \$23,251,000, respectively. We determine total international sales by the international geographic area 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. We have not made sales to Iran or any Iranian governmental entities.

Fluctuating exchange rates and other factors beyond our control, such as international monetary stability, tariff and trade policies and U.S. and foreign tax and economic policies, 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 large number of smaller organizations offering inexpensive solutions. While we are not aware of any published industry market information covering the programming systems market, according to our internal analysis of competitors' revenues, we continue to be the largest competitor in the programming systems equipment market.

We primarily focus on automated programming solutions and believe our solutions offer numerous advantages over alternative solutions as described in the following table:

Benefit Comparison	Data I/O	Alternative Solutions		
	Automated Solutions	In-System Programming with ATE	Outsourced Programming	Manual Programming*
Eliminates production bottlenecks	x		x	
	x		x	x



Requires few internal engineering resources			
Programs large files quickly	x		x
Supports multiple devices per board easily	x		x
Supports multiple boards per panel easily	x		x
Ensures minimum yield loss	x	x	
Enables intellectual property protections	x	x	
Automates quality tracking	x	x	
Ensures traceability and configuration control	x	x	
Minimize risk of human error	x	x	
No inventory at risk from software changes	x	x	
Just-in-time programming	x	x	
Programs after placement of device on board		x	
Integrates with factory software systems	x	x	

\* *Data I/O also offers manual programming solutions.*

## 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 facility in Redmond, Washington and we outsource our circuit board manufacturing and fabrication. Most of our FlashCORE adapter production is produced in China. We use a combination of standard components, proprietary custom integrated circuits ("ICs") and fabricated parts manufactured to our specifications. A significant outside supplier of our proprietary products is located in Germany: Yamaichi manufactures our specialty sockets. Most components used are available from a number of different suppliers and subcontractors but certain items, such as some handler and programmer 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 in obtaining supplies. 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 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 60 days after receipt of the order. Our backlog of pending orders was approximately \$900,000, \$800,000, \$1,600,000 as of December 31, 2012, 2011 and 2010, 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 algorithms to support the latest programmable devices. We are currently focusing our research and development efforts on strategic growth markets, namely new programming technology and automated handling systems for the manufacturing environment, including new programmer technologies, support for the latest flash memories and microcontrollers, and new software capabilities. 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. In 2012, our research and development efforts resulted in the release of the FLXHD automated duplication system. We have reduced our planned development of Azido technology.

During 2012, 2011 and 2010, we made expenditures for research and development of \$5,564,000, \$5,470,000 and \$4,159,000, respectively, representing 32.6%, 20.5% and 15.8% of net sales, respectively. Research and development costs are expensed as incurred.

## **Patents, Copyrights, Trademarks and Licenses**

We rely on a combination of patents, copyrights, trade secrets and trademarks to protect our intellectual property, as well as product development and marketing skill, to establish and protect our market position. We have continued to add new patents to our patent portfolio over the past few years as we developed strategic new technologies.

On April 29, 2011, we acquired software technology consisting of patents, software source code, and other intellectual property which we now call Azido. We continue to own this technology, but in December of 2012 the value of the technology was written down by an Azido related impairment charge of \$2.3 million.

We attempt to protect our rights in proprietary software products, including TaskLink, Factory Integration 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, on those occasions where software is sold separately, revenue is recognized when a sales agreement exists, delivery has occurred, the fee is fixed or determinable, and collectability is probable. For certain contract software development projects, revenue is recognized using the percentage-of-completion methodology.

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 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.

## **Employees**

As of December 31, 2012, we had a total of 94 employees, of which 41 were located outside the U.S. and 8 of which are 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 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.

## Environmental Compliance

Our facilities are subject to numerous laws and regulations concerning the discharge of materials or otherwise relating to the environment. 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, 2013:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Anthony Ambrose	51	President and Chief Executive Officer
Joel S. Hatlen	54	Vice President and Chief Financial Officer
		Secretary and Treasurer
Gordon B. Bluechel	50	Vice President, Operations and Administration

Anthony Ambrose joined Data I/O as President October 2012 and Chief Executive Officer in November 2012. He was appointed to the Board of Directors of Data I/O in October 2012. Prior to Data I/O, Anthony was Owner and Principal of Cedar Mill Partners, LLC, a strategy consulting firm. Until 2011, he was Vice President and General Manager at RadiSys Corporation where he led three product divisions and worldwide engineering. At RadiSys, he established the telecom platform business and grew it to over \$125M in annual revenues. Until 2007, Anthony 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. Anthony holds a Bachelors of Science in Engineering from Princeton University, graduating Magna cum Laude.

Joel S. Hatlen joined Data I/O in September 1991 and has served as Vice President, Chief Financial Officer, Secretary and Treasurer since January 1998. He served as Chief Accounting Officer since February 1997 and Corporate Controller since December 1993. Previously, he was Tax Manager and Senior Tax Accountant. From September 1981 until joining Data I/O, Mr. Hatlen was employed by Ernst & Young LLP as a Certified Public Accountant, where his most recent position was Senior Manager.

Gordon B. Bluechel joined Data I/O in November 1992 and was named an executive officer in November 2008. He currently serves as the Vice President of Operations and Administration. Prior to his current role, he served as Vice President/Director of Operations beginning in 2007, Director of Operations from 2005 to 2007, General Manager of In-System Programming from 2004 to 2005, Director of Americas Sales and Service from 2002 to 2004, Director of Worldwide Service from 2001 to 2002, General Manager of Sprint Operations in Germany from 2000 to 2001. Prior to being named General Manager of Sprint Operations, Mr. Bluechel held various management and staff positions with Data I/O Corporation.

## **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, prospective products, new technologies, establishing foreign operations, future performance or results of current and anticipated products, sales efforts, expenses, outsourcing of functions, outcome of contingencies, impact of regulatory requirements, restructure actions and financial results.*

*Any or all of the forward-looking statements in this Annual Report or in any other public statement made may turn out to be wrong. 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**

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

Our business is highly impacted by capital spending plans and other economic cycles that affect the users and manufacturers of integrated circuits. These 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 recent years and are currently experiencing, 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. We may require additional cash in our U.S. operations causing repatriation of cash and resulting in tax costs and related tax valuation allowances. These factors could have a material adverse effect on our business and financial condition.

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

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 system platform or the robotics for new automated handling systems

- inability to hire qualified personnel
- delays or failures to perform by third parties involved in our development projects
- development of new products or services that are not accepted by the market

These problems may result in a decline in sales.

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 shortages (such as supply chain disruptions from the earthquake in Japan)
- the timing of significant orders
- the sales channel mix of direct vs. indirect distribution
- civil unrest, war or terrorism
- health issues (such as the outbreak of a virus)
- customers' budgets
- 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 obtaining authorizations in setting up new operations or locations

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.

Failure to adapt to technology trends in our industry may hinder 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 that may negatively impact our business include:

- new device package types, densities and technologies requiring hardware and software changes in order to be programmed by our products, particularly certain segments of the high density NAND and e-MMC markets where after placement programming is recommended by the semiconductor manufacturers



- electronics equipment manufacturing practices, such as widespread use of in-circuit programming
- customer software platform preferences different from those on which our products operate
- 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.

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

We have incurred operating losses in two of the last five years and five 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. As a result, we may need to generate greater revenues than we have recently in order to achieve and maintain profitability. However, we cannot provide assurance that our revenues will increase and our business strategies may not be successful, resulting in future losses.

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 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 our existing cash and cash equivalents will be sufficient to meet our working capital requirements for at least the next twelve months. We may require additional cash in our U.S. operations causing potential repatriation of cash from the \$8 million held in our foreign operations, which could result in tax costs and related tax valuation allowances. Thereafter, depending on the development of our business, we may need to raise additional cash for working capital or other expenses. We may also encounter opportunities for acquisitions or other business initiatives that require significant cash commitments, or unanticipated problems or expenses that could result in a requirement for additional cash before that time.

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 the current 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.

We may face increased competition and may 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.

If our relationship with semiconductor manufacturers deteriorates, our business may be adversely affected.

We work closely with most semiconductor manufacturers to ensure that our programming systems comply with their requirements. In addition, many semiconductor manufacturers recommend our 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 are occurring that limit the effectiveness of pre-placement programming, particularly for very small high density NAND and e-MMC devices, certain semiconductor manufacturers are not recommending or may not continue recommending our programming systems for these devices. Our business may be adversely affected if our relationships with

semiconductor manufacturers deteriorate.

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 used in our products are currently available from either a single supplier or from a limited number of suppliers. If we cannot develop alternative sources of these components, if sales of parts 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. Over estimation of demand will lead to excess inventories that may become obsolete.

Certain of our sockets, parts and boards are currently manufactured to our specifications by a third-party foreign contract manufacturers and we are sourcing certain parts or options from foreign manufacturers. 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 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.

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

International sales represented approximately 83%, 90% and 88% of our net revenue for the fiscal years ended December 31, 2012, 2011 and 2010, 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:

- economic uncertainty related to the European sovereign debt situation
- migration of manufacturing to low cost geographies
- unexpected changes in regulatory requirements
- tariffs and taxes
- difficulties in establishing, staffing and managing foreign operations
- longer average payment cycles and difficulty in collecting accounts receivable
- fluctuations in foreign currency exchange rates
- compliance with applicable export licensing requirements
- 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 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”) from which we are relying on an exemption for test and measurement companies. 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, China, Hong Kong, Brazil and Canada. Our business and financial condition is sensitive to currency exchange rates and any restrictions imposed on their currencies including restrictions on repatriations of cash. Any repatriation of cash is expected to have tax costs and the related foreign tax deduction or credit will require additional tax valuation allowance. Currency exchange fluctuations in these countries may adversely affect our investment in our subsidiaries.

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

We rely on patents, copyrights, trade secrets and trademarks to protect our intellectual property, as well as product development and marketing skill to establish and protect our market position. We attempt to protect our rights in proprietary software products, including TaskLink, our intellectual property 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.

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 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.

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 additional debt, which would weaken our balance sheet. We may also capitalize goodwill and intangible assets acquired, the impairment of which would reduce our profitability. We cannot guarantee that future acquisitions will improve our business or operating results.

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 are “leased” with the arrangements made under the “FSCO” labor agreement and we could be adversely affected if we were unable to continue that arrangement.

Our Chief Executive Officer transition involves significant risks that may adversely affect our business.

Mr. Ambrose, our Chief Executive Officer (“CEO”), joined Data I/O in the fourth quarter of 2012. He is in the process of assessing our business and refining our strategy and operations. The new CEO transition could be disruptive to the organization, business plans, and retention of other team members which could have a material adverse effect on our business or operations.

Failure to comply with 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 by the required deadlines 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, 2012. 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 83% 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 the 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, the proposed regulation may affect some of our suppliers. 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. 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.

Our stock price may be volatile and, as a result, you may lose some or all of your 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 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.



Cyber security breaches or terrorism could result in liabilities or costs as well as damage to our data or customer access to our website and information systems. The collection, storage, transmission, use and disclosure of user data and personal information 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.

**Item 1B. Unresolved Staff Comments**

None.

**Item 2. Properties**

We amended our lease agreement for the Redmond, Washington headquarters facility effective February 1, 2011, extending the term to August 2016, lowering the square footage to 32,646 and lowering the rental rate. The lease square footage increases to 33,676 effective February 1, 2014. The lease base annual rental payments during 2012, 2011 and 2010 were approximately \$487,000, \$326,000, and \$587,000, respectively.

In addition to the Redmond facility, approximately 13,000 square feet is leased at three foreign locations, including our German sales, service and engineering operations located in Munich, Germany, under a five-year lease starting in 2010, a sales, service, operations and engineering office located in Shanghai, China under a two-year lease starting in 2011 and a logistics office located in Hong Kong under a one-year lease starting in 2012.

**Item 3. Legal Proceedings**

As of December 31, 2012, we are not a party to any legal proceedings, 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.

From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business.

**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**

The following table shows, for the periods indicated, the high and low price information for our Common Stock as reported by the NASDAQ Capital Market (NASDAQ symbol is DAIO). The closing price was \$1.65 on December 31, 2012.

	<u>Period</u>	<u>High</u>	<u>Low</u>
2012	Fourth Quarter	\$2.50	\$1.39
	Third Quarter	2.94	2.03
	Second Quarter	3.92	2.38
	First Quarter	4.39	3.60
2011	Fourth Quarter	\$4.79	\$3.32
	Third Quarter	6.19	4.14
	Second Quarter	6.25	5.56
	First Quarter	6.24	5.01

The approximate number of shareholders of record as of March 22, 2013 was 533.

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, 2012 and 2011 except for the issuance of 163,934 shares (\$1 Million) in connection with the software technology acquisition on April 29, 2011.

Pursuant to NASDAQ rules, the initial equity compensation for Anthony Ambrose was approved by the independent directors and was classified as an employment inducement grant on October 25, 2012 consisting of 200,000 Non-Qualified Stock Options vesting quarterly over 4 years with a six year life and a 75,000 Restricted Stock Award vesting annually over 4 years.

See Item 12 for the Equity Compensation Plan Information.

## ISSUER PURCHASES OF EQUITY SECURITIES

	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Repurchase Program	Approximate Dollar Value of Shares that May Yet Be Purchased under the Program
<u>\$1 million program dated October 20, 2011:</u>				
November 2011	32,068	\$3.88	32,068	\$874,328
December 2011	30,848	\$4.07	30,848	\$747,463
January 2012 (1)	10,581	\$3.90	10,581	\$0
<u>\$6 million program dated January 9, 2012:</u>				
January 2012	171,832	\$4.18	171,832	\$5,274,294
February 2012	243,862	\$4.25	243,862	\$4,228,920
March 2012 (2)	1,056,514	\$3.95	1,056,514	\$0
Total	1,545,705	\$4.02	1,545,705	

(1) Program terminated January 13, 2012

(2) Program terminated March 26, 2012

On October 20, 2011, we announced a stock repurchase program to buy back up to \$1 million dollars of stock over four quarters. Through December 31, 2011, we repurchased 62,916 shares of stock at an average price of \$3.97 for a total repurchase amount of \$249,986 plus \$2,517 in commissions. On January 9, 2012, our board of directors approved a new and

expanded 2012 share repurchase program with provisions to buy back up to \$6 million dollars of stock. The program included establishing a Rule 10b5-1 plan under the Exchange Act to provide flexibility to make purchases at any time. The 10b5-1 trading plan allows us to repurchase our common stock in the open market during periods in which stock trading is otherwise closed for us. On January 13, 2012, the October 2011 stock repurchase program was terminated and the new expanded program went into effect. On March 26, 2012 this program was terminated and no further stock repurchase programs went into effect during the remainder of 2012.

**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, industry prospects and trends; future results of operations or financial position; breakeven revenue point; integration of acquired products and operations; market acceptance of our newly introduced or upgraded products or services; development, introduction and shipment of new products or services; changing foreign operations; 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 have renewed our focus on managing the core programming business to return to profitability, while developing and enhancing products to drive future revenue and earnings growth. Our challenge continues to be operating in a cyclical and rapidly evolving industry environment. We are continuing our efforts to balance business geography shifts, increasing costs and strategic investments in our business with the level of demand and mix of business we expect.

We are focusing our research and development efforts in our strategic growth markets, namely new programming technology, automated programming systems for the

manufacturing environment and software. We continue to focus on extending the capabilities and support for our FlashCORE architecture, and the RoadRunner, FLX, PS and FlashPAK product lines. Our applications innovation strategy provides complete solutions to target customer's business problems. These solutions generally have a larger software element, may involve third-party components, and in many cases will be developed or customized to address the specific requirements of individual customers. We believe by adding these features to our strategic product platforms, we will continue to set ourselves apart from other product suppliers and elevate our relationships with our customers.

At the end of 2012, an impairment evaluation of our Azido software technology acquired in April of 2011 resulted in a \$2.3 million write down. This resulted from changes in our evaluation of potential cash flows from projected internal and external use of Azido during the fourth quarter of 2012. We are in the process of evaluating strategic alternatives for the Azido technology.

Our customer focus has been on strategic high volume manufacturers in key market segments like wireless, automotive, industrial controls and programming centers and supporting NAND Flash, like e-MMC, and microcontrollers on our newer products.

We continued to address the effectiveness of our sales and marketing organization and sales channels by adding and changing channels and by providing all of our channel partners with extensive product and sales training. We recognized the need to diversify our customer base and are continuing to take steps to broaden and improve our channels of distribution and representation to reach a greater number of customers. We believe these channel changes will help us grow our business more rapidly, both by adding new customers and increasing penetration of existing accounts.

## **BUSINESS RESTRUCTURING PROGRESS**

As a result of the business downturn we experienced this year and the uncertain business outlook, we took restructuring actions in September 2012 to reduce quarterly operating expenses and production costs, with these actions reducing future quarterly operating costs when fully implemented in the first quarter of 2013 by \$300,000 and reduced costs by \$350,000 in

2012. These actions included reductions in personnel and the use of contractors, professionals, and consultants, as well as focusing our development efforts on a smaller number of projects.

The net restructuring charge associated with these 2012 actions was \$207,000 and was primarily related to severance. The restructuring actions were substantially completed during the fourth quarter of 2012. Restructure amounts totaling \$25,000 remain accrued at December 31, 2012 and are expected to be completely paid out during the first quarter of 2013. We expect to continue to look at further cost control measures.

### **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 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:** Sales of our semiconductor programming equipment are recognized at the time of shipment. We have determined that our automated products have 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 considered a separate element. These systems are standard products with published product specifications and are configurable with standard options. The evidence that these systems could be 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 customers and the history provided by our installed base of products upon which the current versions were based. When arrangements include multiple elements, we recognize revenue when the criteria for revenue recognition have been met for each element individually, with multiple elements done on a pro-rata basis.



Installation that is considered perfunctory includes any installation that can be performed by other parties, such as distributors, other vendors, or in most cases the customer themselves. This takes into account the complexity, skill, and training needed as well as customer expectations regarding installation. The revenue related to products requiring installation that is perfunctory is recognized at the time of shipment provided that persuasive evidence of an arrangement exists, shipment has occurred, the price is fixed or determinable, and collectability is reasonably assured.

We record revenue from the sale of service and update contracts as deferred revenue and we recognize it on a straight-line basis over the contractual period, which is typically one year. Service revenue from time and materials contracts and training services is recognized as services are performed. We recognize software revenue upon shipment provided that only inconsequential obligations remain on our part, substantive acceptance conditions, if any, have been met and when the fee is fixed and determinable and when collection is deemed probable.

During 2011, certain fixed-price engineering service contracts that required significant production or customization of software, were accounted for using the percentage-of-completion method. We use the percentage-of-completion method of accounting because it is the most accurate method to recognize revenue based on the nature and scope of certain of our fixed-price professional engineering service contracts; it is a better measure of periodic income results than other methods and it better matches revenue recognized with the costs incurred. Percentage of completion is measured based primarily on input measures such as hours incurred to date compared to total estimated hours to complete, with consideration given to output measures, such as contract milestones, when applicable. Significant judgment is required when estimating total hours and progress to completion on these arrangements, which determines the amount of revenue we recognize as well as whether a loss is recognized if one is expected to be incurred upon project completion. Revisions to hour and cost estimates are incorporated in the period the amounts are recognized if the results of the period have not been reported; otherwise, the revision of estimates are recognized in the period in which the facts that give rise to the revision become known.

We establish a reserve for sales returns based on historical trends in product returns and estimates for new items. We have a stated return policy that customers can return standard products for any reason within 30 days after delivery provided that the returned product is received in its original condition, including all packaging materials, for a refund of the price paid less a restocking charge of 30% of the total amount invoiced for the product returned, unless such restocking charge is waived by us. For us to recognize revenue, the price is fixed or determinable at the date of the sale, the buyer has paid or is obligated to pay and 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 Data I/O and we have no contractual obligations for future performance to directly bring about the resale of the product by the buyer.

**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 market. 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 or there is 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 uncertain economic outlook for our industry and capital spending, we expect to continue to limit the recognition of net deferred tax assets and accounting for uncertain tax positions and to maintain the tax valuation allowances. We expect, therefore, that reversals of the tax valuation allowance will take place only as we are able to take advantage of the underlying tax loss or other attributes in carry forward. 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 and performance share awards, using the estimated grant date fair value method of accounting. We estimate the fair value using the Black-Scholes valuation model, 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. 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 (in thousands)	2012	Change	2011
Automated programming systems	\$10,772	(37.6%)	\$17,274
Non-automated programming systems	6,313	(32.8%)	9,392
Total programming systems	\$17,085	(35.9%)	\$26,666
Net sales by location (in thousands)	2012	Change	2011
United States	\$2,835	4.1%	\$2,724
% of total	16.6%		10.2%
International	\$14,250	(40.5%)	\$23,942
% of total	83.4%		89.8%

Revenues decreased 35.9% to \$17.1 million for the year ended December 31, 2012, from \$26.7 million for 2011. On a regional basis, international revenue was lower for the year 2012 compared to the same period in 2011. On a product basis, RoadRunner family revenue was up 15% and all other product families declined for the year 2012 compared with 2011. We believe the decline in revenue compared to last year relates primarily to reduced capital spending resulting from a downturn in Asia-based electronics manufacturing and economic uncertainty related to the European sovereign debt situation. Our revenues were also impacted by the change in the Euro translation rate, compared to one year ago, where the Euro devaluation resulted in \$496,000 less revenue in 2012.

**Gross Margin**

(in thousands)	2012	Change	2011
Gross margin	\$8,638	(43.3%)	\$15,235
Percentage of net sales	50.6%		57.1%

Gross margin as a percentage of sales was 50.6% for the year ended December 31, 2012, compared with 57.1% in 2011. The change in gross margin percentage was primarily due to the impact of decreased sales volume relative to fixed manufacturing costs. Partially offsetting the gross margin percentage decrease were lower factory variances and lower labor

costs due to restructuring actions and less engineering costs associated with software development contracts compared to 2011.

## Research and Development

	2012	Change	2011
(in thousands)			
Research and development	\$5,564	1.7%	\$5,470
Percentage of net sales	32.6%		20.5%

R&D expenses increased \$94,000 for the year ended December 31, 2012, compared to the same period in 2011. The increase includes \$240,000 related to a full year versus eight months of Azido related cost, \$111,000 higher project R&D materials, \$85,000 less engineering labor charged to cost of goods sold related to custom software development contracts, and \$85,000 higher depreciation expense, offset in part by \$329,000 lower consultant and contractor expense and \$157,000 lower personnel costs primarily related to restructure actions taken in the third quarter of 2012.

Our R&D spending also fluctuates based on the number and the development stage of projects. The new FLXHD, an automated system for duplicating e-MMC NAND devices was introduced in February 2012.

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. 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 focusing our R&D efforts on solutions for strategic growth markets, including new programming technology, automated programming systems for the manufacturing environment, extending the capabilities and support for our FlashCORE programmer architecture.

### **Selling, General and Administrative**

	2012	Change	2011
(in thousands)			
Selling, general & administrative	\$7,450	(10.3%)	\$8,304
Percentage of net sales	43.6%		31.1%

Selling, general and administrative (“SG&A”) expenses decreased \$854,000 for the year ended December 31, 2012, compared to the same period in 2011. The primary reductions included \$405,000 lower costs associated with outside contractors and consultants, \$232,000 lower incentive compensation due to the financial results, lower sales commissions of \$222,000 due to the lower sales volume, and \$470,000 other costs reductions including lower advertising, shows, travel, vacation and depreciation. Partially offsetting these reductions is approximately \$475,000 related to CEO separation and recruiting costs incurred in 2012.

### **IMPAIRMENT CHARGE**

A year end impairment analysis was performed due to indicators of impairment from changes in our use and plans for Azido technology and our market capitalization being below our net book value. During the fourth quarter of 2012, changes in Azido projects and projected cash flows, which decreased or eliminated our expected future cash flows related to Azido technology’s use or disposition, resulted in an impairment charge of \$2.3 million and a carrying value of \$35,000 at year end.

### **Interest**

	2012	Change	2011
(in thousands)			
Interest income	\$291	200.0%	\$97
Interest expense	\$0	(100.0%)	(\$14)

Interest income increased by \$194,000 for the twelve month period ending December 31, 2012 compared to the same period in 2011 primarily due to interest received related to a German tax refund and higher invested balances in foreign accounts.

## Income Taxes

	2012	Change	2011
(in thousands)			
Income tax (expense) benefit	\$327	(240.3%)	(\$233)

Income tax (expense) benefit recorded for 2012 and 2011 resulted primarily from foreign taxes on income and tax refunds in our foreign subsidiaries. During the second quarter of 2012, we prevailed in tax issues from the 1995-1998 years related to an acquisition and we received refunds from German tax authorities of approximately \$318,000.

The effective tax rate differed from the statutory tax rate primarily due to the effect of valuation allowances, as well as foreign taxes and refunds. We had a valuation allowance of \$10.7 million and \$8.9 million at December 31, 2012 and 2011 respectively. Our deferred tax assets and valuation allowance have been reduced by approximately \$132,000 and \$113,000 associated with the requirements of accounting for uncertain tax positions at December 31, 2012 and 2011 respectively. Given the uncertainty created by our past loss history and the cyclical nature of the industry in which we operate, we expect to continue to limit the recognition of net deferred tax assets and maintain the 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 gains and (losses) of (\$106,000) and (\$248,000) in 2012 and 2011, respectively. The transaction gains or losses resulted primarily from translation adjustments to foreign inter-company accounts and US dollar accounts held by foreign subsidiaries; sales by our German subsidiary to certain customers, which were invoiced in US dollars; and Brazilian intercompany balances.

## Financial Condition:

### Liquidity and Capital Resources

	2012	Change	2011
(in thousands)			
Working capital	\$13,837	(\$8,518)	\$22,355

At December 31, 2012, our principal sources of liquidity consisted of existing cash and cash equivalents. Our working capital decreased by \$8,518,000 in 2012. Our current ratio was 4.6 and 5.8 for December 31, 2012 and 2011, respectively.

For the year ended December 31, 2012, our cash and cash equivalents decreased by \$7,592,000, primarily due to cash used in our share repurchase programs of \$6.0 million completed in the first quarter of 2012 and due to funding the net loss for the year ended December 31, 2012. Cash and cash equivalents held in foreign bank accounts totaled \$8,190,000 at December 31, 2012 and any repatriation of cash is expected to have tax costs and related additional tax valuation allowance. We had no share repurchase programs authorized at December 31, 2012.

We expect that we will continue to make capital expenditures to support our business and anticipate that present working capital will be sufficient to meet our operating requirements. Capital expenditures are expected to be funded by existing and internally generated funds or lease financing.



As a result of our significant product development; customer support; cyclical industry; and selling and marketing efforts, we require substantial working capital to fund our operations. Over the last several years, we restructured our operations to lower our costs and operating expenditures in certain geographic regions and to lower the level of revenue required for our net income breakeven point, to preserve our cash position and to focus on returning to profitable operations. Given our cash position of \$10.5 million as of December 31, 2012, we believe that we have sufficient working capital available under our operating plan to fund our operations, business investment and capital requirements through at least December 31, 2013. 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.

### **OFF-balance sheet arrangements**

Except as noted in the accompanying consolidated financial statements in Note 8, "Operating Lease Commitments" and Note 9, "Other Commitments", we had no off-balance sheet arrangements.

### **Share repurchase program**

On October 20, 2011, we announced a stock repurchase program to buy back up to \$1 million dollars of stock over four quarters. Through December 31, 2011, we repurchased 62,916 shares of stock at an average price of \$3.97 for a total repurchase amount of \$249,986 plus \$2,551 in commissions. For the year ended December 31, 2012 an additional 10,581 shares were repurchased under this plan at an average price of \$3.90 for a total repurchase amount of \$41,274 plus \$432 in commissions. Since this program began, we have repurchased 73,497 shares of stock at an average price of \$3.96 for a total of \$291,260 plus \$2,983 in commissions. On January 13, 2012, this stock repurchase program was terminated.

On January 9, 2012, our board of directors approved a new and expanded 2012 share repurchase program with provisions to buy back up to \$6 million dollars of stock. The program included establishing a Rule 10b5-1 plan under the Exchange Act to provide flexibility to make purchases at any time. The 10b5-1 trading plan allows us to repurchase our common stock in the open market during periods in which stock trading is otherwise closed for us. For the year ended December 31, 2012,

1,472,208 shares of stock have been repurchased at an average price of \$4.03 for a total of \$5,927,937 plus \$56,938 in commissions, completing the program. There has been no further share repurchase program activity during 2012.

## **NEW ACCOUNTING PRONOUNCEMENTS**

In February 2013, the FASB issued ASU No. 2013-02, *"Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income."* Under ASU 2013-02, an entity is required to provide information about the amounts reclassified out of Accumulated Other Comprehensive Income ("AOCI") by component. In addition, an entity is required to present, either on the face of the financial statements or in the notes, significant amounts reclassified out of AOCI by the respective line items of net income, but only if the amount reclassified is required to be reclassified in its entirety in the same reporting period. For amounts that are not required to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures that provide additional details about those amounts. ASU 2013-02 does not change the current requirements for reporting net income or other comprehensive income in the financial statements. ASU 2013-02 is effective for us on January 1, 2013. We believe the adoption of this update is not expected to have a material impact on our financial statements.

In July 2012, the FASB issued ASU No. 2012-02, *"Intangibles-Goodwill and Other (Topic 350) – Testing Indefinite-Lived Intangible Assets for Impairment"*, which permits an entity to make a qualitative assessment to determine whether it is more likely than not that an indefinite-lived intangible asset, other than goodwill, is impaired. Entities are required to test indefinite-lived intangible assets for impairment at least annually and more frequently if indicators of impairment exist. If an entity concludes, based on an evaluation of all relevant qualitative factors, that it is not more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying amount, it is not required to perform the quantitative impairment test for that asset. Because the qualitative assessment is optional, an entity is permitted to bypass it for any indefinite-lived intangible asset in any period and apply the quantitative test. ASU 2012-02 also permits the entity to resume performing the qualitative assessment in any subsequent period. ASU 2012-02 is effective for impairment tests performed for fiscal years beginning after September 15, 2012 and early adoption is permitted. We believe the adoption of this update is not expected 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 25 through 44.

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**report of Independent REGISTERED PUBLIC ACCOUNTING FIRM**

Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders  
Data I/O Corporation

We have audited the accompanying consolidated balance sheets of Data I/O Corporation and subsidiaries (the Company) as of December 31, 2012 and 2011, and 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, 2012. Our audits of the basic consolidated financial statements included the financial statement schedule listed in the index appearing under Item 15 (Schedule II). These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, 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. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Data I/O Corporation and subsidiaries as of December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2012, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/S/GRANT THORNTON LLP

Seattle, Washington  
March 27, 2013



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

**December 31,  
2012**

**December 31,  
2011**

**ASSETS**

## CURRENT ASSETS:

Cash and cash equivalents	\$10,528	\$18,120
Trade accounts receivable, net of allowance for doubtful accounts of \$89 and \$115, respectively	2,648	4,351
Inventories	4,033	3,964
Other current assets	486	543
<b>TOTAL CURRENT ASSETS</b>	<b>17,695</b>	<b>26,978</b>
 Property, plant and equipment – net	 1,006	 1,489
Intangible software technology – net	35	2,793
Other assets	86	85
<b>TOTAL ASSETS</b>	<b>\$18,822</b>	<b>\$31,345</b>

**LIABILITIES AND STOCKHOLDERS' EQUITY**

## CURRENT LIABILITIES:

Accounts payable	\$850	\$1,122
Accrued compensation	1,183	1,255
Deferred revenue	1,238	1,464
Other accrued liabilities	539	710
Accrued costs of business restructuring	25	-
Income taxes payable	23	72
<b>TOTAL CURRENT LIABILITIES</b>	<b>3,858</b>	<b>4,623</b>

Long-term other payables	219	253
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COMMITMENTS	-	-
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## STOCKHOLDERS' EQUITY

## Preferred stock -

Authorized, 5,000,000 shares, including

200,000 shares of Series A Junior Participating

Issued and outstanding, none	-	-
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Common stock, at stated value -

Authorized, 30,000,000 shares

Issued and outstanding, 7,741,686 shares as of  
December 31, 2012

and 9,207,730 shares as of December 31, 2011	17,928	23,414
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Accumulated earnings (deficit)	(4,466)	1,963
Accumulated other comprehensive income	1,283	1,092
TOTAL STOCKHOLDERS' EQUITY	14,745	26,469
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$18,822	\$31,345

*See notes to consolidated financial statements*

**DATA I/O CORPORATION**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(in thousands, except per share amounts)

	<b>For the Years Ended December 31,</b>	
	<b>2012</b>	<b>2011</b>
Net Sales	\$17,085	\$26,666
Cost of goods sold	8,447	11,431
Gross margin	8,638	15,235
Operating expenses:		
Research and development	5,564	5,470
Selling, general and administrative	7,450	8,304
Impairment charge	2,358	-
Provision for business restructuring	207	-
Total operating expenses	15,579	13,774
Operating income (loss)	(6,941)	1,461
Non-operating income (expense):		
Interest income	291	97
Interest expense	-	(14)
Foreign currency transaction gain (loss)	(106)	(248)
Total non-operating income (expense)	185	(165)
Income (loss) before income taxes	(6,756)	1,296
Income tax (expense) benefit	327	(233)
Net income (loss)	(\$6,429)	\$1,063
Basic earnings (loss) per share	(\$0.80)	\$0.12
Diluted earnings (loss) per share	(\$0.80)	\$0.11
Weighted-average basic shares	7,995	9,181
Weighted-average diluted shares	7,995	9,320

*See notes to consolidated financial statements*



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

	<b>For the Years Ended December 31,</b>	
	<b>2012</b>	<b>2011</b>
Net Income (loss)	(\$6,429)	\$1,063
Other comprehensive income:		
Foreign currency translation gain	191	199
Comprehensive income (loss)	(\$6,238)	\$1,262

*See notes to consolidated financial statements*

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

	Common Stock		Retained	Accumulated	Total
	Shares	Amount	Earnings	and Other	Stockholders'
			(Deficit)	Income (Loss)	Equity
<b>Balance at December 31, 2010</b>	9,027,867	\$22,172	\$900	\$893	\$23,965
Stock options exercised	67,655	18			18
Repurchased shares	(62,916)	(253)			(253)
Stock awards issued, net of tax withholding	7,172	(23)			(23)
Issuance of stock through:					
Employee Stock Purchase Plan	4,018	23			23
Purchase of Software Technology	163,934	1,000			1,000
Share-based compensation		477			477
Net income			1,063		1,063
Other comprehensive income				199	199
<b>Balance at December 31, 2011</b>	9,207,730	\$23,414	\$1,963	\$1,092	\$26,469
Stock options exercised	1,162	-			-
Repurchased shares	(1,482,789)	(6,026)			(6,026)
Stock awards issued, net of tax withholding	8,699	(8)			(8)
Issuance of stock through:					
Employee Stock Purchase Plan	6,884	23			23
Share-based compensation		525			525
Net income (loss)			(6,429)		(6,429)
Other comprehensive income				191	191
<b>Balance at December 31, 2012</b>	7,741,686	\$17,928	(\$4,466)	\$1,283	\$14,745

*See notes to consolidated financial statements*

**DATA I/O CORPORATION**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(in thousands, except share amounts)

	<b>For the Years Ended December 31,</b>	
	<b>2012</b>	<b>2011</b>
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net income (loss)	(\$6,429)	\$1,063
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation and amortization	1,265	1,170
Equipment transferred to cost of goods sold	150	298
Share-based compensation	525	477
Impairment charge	2,318	-
Net change in:		
Trade accounts receivable	1,710	636
Inventories	(54)	(380)
Other current assets	61	(9)
Accrued cost of business restructuring	25	-
Accounts payable and accrued liabilities	(574)	(543)
Deferred revenue	(227)	(126)
Other long-term liabilities	(41)	169
Deposits and other long-term assets	-	72
Net cash provided by (used in) operating activities	(1,271)	2,827
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Additions to property, plant and equipment	(492)	(1,406)
Purchase of software technology	-	(2,089)
Cash provided by (used in) investing activities	(492)	(3,495)
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Proceeds from issuance of common stock	16	18
Repurchase of common stock	(6,026)	(253)
Payment of capital lease obligation	-	(92)
Cash provided by (used in) financing activities	(6,010)	(327)
Decrease in cash and cash equivalents	(7,773)	(995)
Effects of exchange rate changes on cash	181	173
Cash and cash equivalents at beginning of period	18,120	18,942
Cash and cash equivalents at end of period	\$10,528	\$18,120
<b>Supplemental disclosure of non-cash financing activities:</b>		
Issuance of common stock for consideration in asset purchase:		
163,934 shares	\$0	\$1,000

Cash paid during the year for:

Interest

\$0

\$4

Income Taxes

(\$215)

\$303

*See notes to consolidated financial statements*

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## **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 the Far East, Europe and the United States. Our manufacturing operations are currently located in the United States, with most of our FlashCORE adapters manufactured in China. An outside supplier located in Germany currently manufactures our Sprint non-automated programming systems.

##### 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, net of taxes recognized. 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 foreign jurisdictions. Deposits in U.S. banks exceed the FDIC insurance limit. We have not experienced any losses on its cash and cash equivalents. Cash and cash equivalents held in foreign bank accounts totaled \$8,190,000 at December 31, 2012.

### 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 accrued, 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 market 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 market) 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 long-lived assets, including property, plant and equipment and amortizable intangible assets, 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, no impairment was noted for the year ended December 31, 2011. For the year ended December 31, 2012, other than the intangible asset software technology impairment noted in Intangible Assets below, no other impairment was noted for long-lived assets.

### Intangible Assets

Intangible assets include capitalized costs, technical and product rights, patent, trademarks and other intellectual property. Intangible assets are stated at cost and amortized to operations over their estimated useful lives or statutory lives, whichever is shorter. Capitalized intangible assets are included in other long term assets on the balance sheet. We evaluate our intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable using a fair value approach. No such impairment was recognized for the year ended December 31, 2011. For the year ended December 31, 2012, an impairment charge of \$2.3 million was taken against the software technology acquired in April of 2011.

### Patent Costs

We expense external costs, such as filing fees and associated attorney fees, incurred to obtain initial patents, but capitalize as intangible assets acquired patents. 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 realizability of the related deferred tax assets. A valuation allowance is established when necessary to reduce deferred tax assets to amounts expected to be realized.

### 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

We recognize revenue at the time the product is shipped. 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 considered a separate element. 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. When arrangements include multiple elements, we recognize revenue when the criteria for revenue recognition have been met for each element individually, with multiple elements done on a pro-rata basis.

Installation that is considered perfunctory includes any installation that can be performed by other parties, such as distributors, other vendors, or in most cases the customers themselves. This takes into account the complexity, skill and training needed as well as customer expectations regarding installation. The revenue related to products requiring installation that is perfunctory is recognized at the time of shipment provided that persuasive evidence of an arrangement exists, shipment has occurred, the price is fixed or determinable, and collectability is reasonably assured.

We record revenue from the sale of service and update contracts as deferred revenue and we recognize it on a straight-line basis over the contractual period, which is typically one year. We establish a reserve for sales returns based on historical trends in product returns and estimates for new items. We have a stated return policy that customers can return standard products for any reason within 30 days after delivery provided that the returned product is received in its original condition, including all packaging materials, for a refund of the price paid less a restocking charge of 30% of the total amount invoiced for the product returned, unless such restocking charge is waived by us. We recognize revenue when, the price is fixed or determinable, the buyer has paid or is obligated to pay and 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.

Sales were recorded net of actual sales returns and changes to the associated sales return reserve. Sales return reserves were \$60,000 and \$81,000 at December 31, 2012 and 2011, respectively.

When we sell software separately, we recognize software revenue upon shipment provided that only inconsequential obligations remain on our part, substantive acceptance conditions, if any, have been met and when the fee is fixed and determinable and when collection is deemed probable.

During 2011, certain fixed-price engineering services contracts that required significant production or customization of software, were accounted for using the percentage-of-completion method. We use the percentage-of-completion method of accounting because it is the most accurate method to recognize revenue based on the nature and scope of certain of our fixed-price engineering services contracts. It is a better measure of periodic income results than other methods and it better matches revenue recognized with the cost incurred. Percentage-of-completion is measured based primarily on input measures such as hours incurred to date compared to estimated total hours at completion, with consideration given to output measures, such as contract milestones, when applicable. Significant judgment is required when estimating total hours and progress to completion on these arrangements which determines the amount of revenue we recognize as well as whether a loss is recognized if expected to be incurred upon project completion. Revisions to hour and cost estimates are

incorporated in the period the amounts are recognized if the results of the period have not been reported; otherwise, the revision of estimates are recognized in the period in which the facts that give rise to the revision become known.

We transfer certain products out of service from their internal use and make them available for sale. The products transferred are 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.

#### Research and Development

Research and development costs are expensed as incurred.

#### Advertising Expense

Advertising costs are expensed as incurred. Total advertising expenses were approximately \$107,000 and \$220,000 in 2012 and 2011, 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 0 and 123,114 for the years ended December 31, 2012 and 2011 respectively. Options to purchase 1,059,772 and 518,895 shares of common stock were outstanding as of December 31, 2012 and 2011, 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. As of December 31, 2012, three customers, Data Copy Limited, Delphi and Jabil each accounted for more than 10% of our consolidated accounts receivable balance. As of December 31, 2011, one customer, Panasonic, accounted for approximately 10% of our consolidated accounts receivable balance. 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.

### New Accounting Pronouncements

In February 2013, the FASB issued ASU No. 2013-02, *"Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income."* Under ASU 2013-02, an entity is required to provide information about the amounts reclassified out of Accumulated Other Comprehensive Income ("AOCI") by component. In addition, an entity is required to present, either on the face of the financial statements or in the notes, significant amounts reclassified out of AOCI by the respective line items of net income, but only if the amount reclassified is required to be reclassified in its entirety in the same reporting period. For amounts that are not required to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures that provide additional details about those amounts. ASU 2013-02 does not change



the current requirements for reporting net income or other comprehensive income in the financial statements. ASU 2013-02 is effective for us on January 1, 2013. We believe the adoption of this update is not expected to have a material impact on our financial statements.

In July 2012, the FASB issued ASU No. 2012-02, *"Intangibles-Goodwill and Other (Topic 350) – Testing Indefinite-Lived Intangible Assets for Impairment"*, which permits an entity to make a qualitative assessment to determine whether it is more likely than not that an indefinite-lived intangible asset, other than goodwill, is impaired. Entities are required to test indefinite-lived intangible assets for impairment at least annually and more frequently if indicators of impairment exist. If an entity concludes, based on an evaluation of all relevant qualitative factors, that it is not more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying amount, it is not required to perform the quantitative impairment test for that asset. Because the qualitative assessment is optional, an entity is permitted to bypass it for any indefinite-lived intangible asset in any period and apply the quantitative test. ASU 2012-02 also permits the entity to resume performing the qualitative assessment in any subsequent period. ASU 2012-02 is effective for impairment tests performed for fiscal years beginning after September 15, 2012 and early adoption is permitted. We believe the adoption of this update is not expected to have a material impact on our financial statements.

## **NOTE 2-PROVISION FOR BUSINESS RESTRUCTURING**

Restructure reserve amounts at the start of 2011 relate to 2009 restructure actions which included abandoning a portion of the lease on our headquarter building. A lease amendment in 2011 incorporated this space reduction and no amounts remained accrued at December 31, 2011.

As a result of the business downturn we experienced this year and the uncertain business outlook, we took restructuring actions in September 2012 to reduce quarterly operating expenses and production costs. Restructuring actions reduced these costs in 2012 by \$350,000. These actions included reductions in personnel and the use of contractors, professionals, and consultants, as well as focusing our development efforts on a smaller number of projects.

The restructuring charge associated with these actions was \$207,000 and is primarily related to severance. The restructuring actions were substantially completed during the fourth quarter of 2012. Restructure amounts totaling \$25,000 remain accrued at December 31, 2012 and will be paid out during the first quarter of 2013.

An analysis of the restructuring is as follows:



	Reserve Balance Dec 31, 2010	2011 Expense	2011 Payments/ Write-Offs	Reserve Balance Dec 31, 2011	2012 Expense	2012 Payments/ Write-Offs	Reserve Balance Dec 31, 2012
Restructuring (in thousands)							
Downsizing US operations:							
Employee severance	\$ -	\$ -	\$ -	\$ -	\$103	\$103	\$ -
Other costs	58	-	58	-	4	4	-
Downsizing foreign operations:							
Employee severance	-	-	-	-	57	32	25
Other costs	-	-	-	-	43	43	-
Total	\$58	\$ -	\$58	\$ -	\$207	\$182	\$25

**NOTE 3 – ACCOUNTS RECEIVABLE, NET**

Receivables consist of the following:

	December 31, 2012	December 31, 2011
(in thousands)		
Trade accounts receivable	\$2,737	\$4,466
Less allowance for doubtful receivables	89	115
Trade accounts receivable, net	\$2,648	\$4,351

Changes in Data I/O's allowance for doubtful accounts are as follows:

	December 31, 2012	December 31, 2011
(in thousands)		
Beginning balance	\$115	\$138
Bad debt expense (reversal)	(26)	(27)
Accounts written-off	-	(1)
Recoveries	-	5
Ending balance	\$89	\$115

**NOTE 4 – INVENTORIES, NET**

Inventories consisted of the following components:

	December 31, 2012	December 31, 2011
(in thousands)		
Raw material	\$2,166	\$2,498
Work-in-process	1,262	985
Finished goods	605	481
Inventories	\$4,033	\$3,964

**NOTE 5 – PROPERTY, PLANT AND EQUIPMENT, NET**

Property and equipment consisted of the following components:

	December 31, 2012	December 31, 2011
(in thousands)		
Leasehold improvements	\$481	\$479
Equipment	7,618	7,515
	8,099	7,994
Less accumulated depreciation	7,093	6,505
Property and equipment, net	\$1,006	\$1,489

Total depreciation expense recorded for 2012 and 2011 was \$821,000 and \$878,000 respectively.

**NOTE 6 – INTANGIBLE SOFTWARE TECHNOLOGY, NET**

On April 29, 2011, we purchased software technology for \$2 million in cash and issuance of 163,934 shares of our common stock, valued at \$1 million on the date of purchase. Acquisition costs of \$89,000 were capitalized as part of the transaction. The transaction was accounted for as an asset purchase.

For a period of five years we will pay the seller royalties of 4% of directly associated revenues relating to this acquired software technology. We will expense the royalty payments when they are incurred as we cannot reasonably estimate the

future royalty payment amount at the time of acquisition. For the first three years we will pay an additional royalty of 2.5% of directly associated revenues relating to this acquired software technology to the original developer of the technology. No royalty expense was recognized for the years ended December 31, 2011 and 2012.

A year end impairment analysis was performed due to indicators of impairment from changes in our use and plans for Azido technology and our market capitalization being below our net book value. During the fourth quarter of 2012, changes in Azido projects and projected cash flows, which decreased or eliminated our expected future cash flows related to Azido technology's use or disposition, resulted in an impairment charge of \$2.3 million and a carrying value of \$35,000 at year end.

The following is a summary of the Company's intangible software technology:

	December 31, 2012	December 31, 2011
(in thousands)		
Intangible software technology	\$3,089	\$3,089
Less impairment charge	2,318	-
Less accumulated amortization	736	296
Intangible software technology, net	\$35	\$2,793

Future amortization expense related to this intangible asset is as follows:

	Amortization
(in thousands)	
2013	\$4
2014	4
2015	4
2016	4
2017	4
Thereafter	15
Total	\$35

## NOTE 7 – OTHER ACCRUED LIABILITIES

Other accrued liabilities consisted of the following components:

	December 31, 2012	December 31, 2011
(in thousands)		

Product warranty	\$260	\$396
Sales return reserve	60	81
Other taxes	86	100
Other	133	133
Other accrued liabilities	\$539	\$710

The changes in our product warranty liability for the year ending December 31, 2012 are follows:

	December 31, 2012
(in thousands)	
Liability, beginning balance	\$396
Net expenses	585
Warranty claims	(585)
Accrual revisions	(136)
Liability, ending balance	\$260

**NOTE 8 –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 Leases
(in thousands)	
2013	\$1,017
2014	892
2015	840
2016	513
Total	\$3,262

Lease and rental expense was \$1,166,000 and \$1,149,000 in 2012 and 2011, respectively. Rent expense is recorded on a straight line basis, over the term of the lease, for leases that contain fixed escalation clauses. We amended our lease agreement for the Redmond, Washington headquarters facility effective February 1, 2011, extending the term to August 2016, lowering the square footage to 32,646 and lowering the rental rate. The lease base annual rental payments during 2012 and 2011 were approximately \$487,000 and \$326,000, respectively. The lease square footage increases to 33,676 effective February 1, 2014.

In addition to the Redmond facility, approximately 13,000 square feet is leased at three foreign locations, including our German sales, service and engineering operations located in Munich, Germany, under a five-year lease starting in 2010, a sales, service and engineering office located in Shanghai, China under a two-year lease starting in 2011 and a logistics office located in Hong Kong under a one-year lease starting in 2012.

**NOTE 9 –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, 2012, the purchase and

other obligations totaled \$436,000 of which all but \$15,000 are 2013 commitments.

## **NOTE 10 – CONTINGENCIES**

As of December 31, 2012, we are not a party to any legal proceedings, 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 11 – STOCK AND RETIREMENT PLANS**

### Stock Option Plans

At December 31, 2012, there were 561,831 shares available for future grant under Data I/O Corporation 2000 Stock Compensation Incentive Plan ("2000 Plan"). There were 1,850,236 shares of Common Stock reserved for issuance consisting of 1,575,236 under the 2000 plan and 275,000 under the inducement grant reserve. Pursuant to this 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 may also be granted under the 2000 Plan. Inducement grants were made to our new chief executive officer consisting of 200,000 options and 75,000 restricted shares, which were not made out of the 2000 Plan shares but were made under the terms of the 2000 Plan.

### 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 10% of their gross compensation during an offering period. During 2012 and 2011, a total of 6,884 and 4,018 shares, respectively, were purchased under the plan at average prices of \$3.35 and \$5.78 per share, respectively. At December 31, 2012, a total of 72,568 shares were reserved for future issuance.

### Stock Appreciation Rights Plan

We have a Stock Appreciation Rights Plan (“SAR”) 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.

### Director Fee Plan

We have a Director Fee Plan, not currently in use, which had provided for payment to directors who are not employees of Data I/O Corporation by delivery of shares of our Common Stock. No shares were issued from the plan for 2012 or 2011 board service and 151,332 shares remain available in the plan as of December 31, 2012.

### 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 2012 and 2011, we contributed one dollar for each dollar contributed by a participant, with a maximum contribution of 4% of a participant's earnings. Our matching contribution expense for the savings plan was approximately \$166,000 and \$191,000 in 2012 and 2011.

### Share Repurchase Program

On October 20, 2011, we announced a stock repurchase program to buy back up to \$1 million dollars of stock over four quarters. Through December 31, 2011, we repurchased 62,916 shares of stock at an average price of \$3.97 for a total repurchase amount of \$249,986 plus \$2,551 in commissions. For the year ended December 31, 2012 an additional 10,581 shares were repurchased under this plan at an average price of \$3.90 for a total repurchase amount of \$41,274 plus \$432 in commissions. Since this program began, we have repurchased 73,497 shares of stock at an average price of \$3.96 for a total of \$291,260 plus \$2,983 in commissions. On January 13, 2012, this stock repurchase program was terminated.

On January 9, 2012, our board of directors approved a new and expanded 2012 share repurchase program with provisions to buy back up to \$6 million dollars of stock. The program included establishing a Rule 10b5-1 plan under the Exchange Act to provide flexibility to make purchases at any time. The 10b5-1 trading plan allows us to repurchase our common stock in the open market during periods in which stock trading is otherwise closed for us. For the year ended December 31, 2012, 1,472,208 shares of stock have been repurchased at an average price of \$4.03 for a total of \$5,927,937 plus \$56,938 in commissions, completing the program.

The following is a summary of share repurchase activity under both plans through December 31, 2012:

	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Repurchase Program	Approximate Dollar Value of Shares that May Yet Be Purchased under the Program
<u>\$1 million program dated October 20, 2011:</u>				
November 2011	32,068	\$3.88	32,068	\$874,328
December 2011	30,848	\$4.07	30,848	\$747,463
January 2012 (1)	10,581	\$3.90	10,581	\$0
<u>\$6 million program dated January 9, 2012:</u>				
January 2012	171,832	\$4.18	171,832	\$5,274,294
February 2012	243,862	\$4.25	243,862	\$4,228,920
March 2012 (2)	1,056,514	\$3.95	1,056,514	\$0
Total	1,545,705	\$4.02	1,545,705	

(1) Program terminated January 13, 2012

(2) Program terminated March 26, 2012

## NOTE 12- 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, 2012 and 2011 was as follows:

	Year Ended December 31,	
	2012	2011
(in thousands)		
Cost of goods sold	\$49	\$45
Research and development	112	84

Selling, general and administrative	364	348
Total share-based compensation	\$525	\$477
Impact on net income per share:		
Basic and diluted	(\$0.07)	(\$0.05)

Approximately \$15,000 and \$10,000 of share-based compensation was capitalized into inventory for the years ended December 31, 2012 and 2011, 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. The following weighted average assumptions were used to calculate the fair value of options granted during the years ended December 31:

	Employee Stock Options	
	2012	2011
Risk-free interest rates	0.64%	1.39%
Volatility factors	0.53	0.55
Expected life of the option in years	4.00	4.00
Expected dividend yield	None	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 expect 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 was 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 weighted average grant date fair value of options granted under our stock option plans for the twelve month period ending December 31, 2012 and 2011 was \$.91 and \$2.61, respectively. The following table summarizes stock option activity under our stock option plans for the twelve months ended December 31:

	2012			2011		
	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life in Years	Options	Weighted-Average Exercise Price	
Outstanding at beginning of year	1,038,011	\$4.74		833,841	\$3.94	
Granted	390,000	2.37		324,500	6.02	
Exercised	(29,844)	3.82		(111,893)	2.55	
Cancelled, Expired or Forfeited	(239,762)	4.62		(8,437)	4.62	
Outstanding at end of year	1,158,405	\$4.00	3.43	1,038,011	\$4.74	

Vested or expected to vest at the end of the period	1,046,028	\$4.51	1.98	948,096	\$4.68
Exercisable at end of year	609,812	\$4.10	1.98	551,000	\$4.36

The aggregate intrinsic value of outstanding options is \$0. This represents the total pretax intrinsic value, based on the our closing stock price of 1.65 at December 31, 2012, which would have been received by award holders had all award holders exercised their stock options that were in-the-money as of that date. The aggregate intrinsic value of awards exercised during the twelve month period ended December 31, 2012 was \$4,709.

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

	2012		2011	
	Awards	Weighted - Average Grant Date Fair Value	Awards	Weighted - Average Grant Date Fair Value
Outstanding at beginning of year	30,378	\$5.10	25,235	\$4.27
Granted	112,500	2.19	15,200	6.02
Vested	(11,353)	5.00	(9,485)	4.35
Cancelled	(1,525)	4.11	(572)	5.16
Outstanding at end of year	130,000	\$2.60	30,378	\$5.10

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

	December 31, 2012	December 31, 2011
Unamortized future compensation expense	\$1,040,385	\$1,181,876
Remaining weighted average amortization period in years	2.65	2.65

## NOTE 13- INCOME TAXES

Components of income (loss) before taxes:

(in thousands)	Year Ended Dec. 31, 2012	2011
U.S. operations	(\$6,484)	(\$207)
Foreign operations	(272)	1,503
Total income (loss) before taxes	(\$6,756)	\$1,296

Income tax expense (benefit) consists of:

	Year Ended Dec. 31, 2012	2011
Current tax expense (benefit)		
U.S. federal	(\$8)	\$20
State	(19)	22
Foreign	(300)	191
	(327)	233
Deferred tax expense (benefit) – U.S. federal	-	-
Total income tax expense (benefit)	(\$327)	\$233

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

	Year Ended Dec. 31,	
(in thousands)	2012	2011
Statutory tax	(\$1,937)	\$441
State and foreign income tax, net of federal income tax benefit	(324)	(323)
Valuation allowance for deferred tax assets	1,934	115
Total income tax expense (benefit)	(\$327)	\$233

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

	Year Ended December 31,	
	2012	2011
(in thousands)		
Deferred income tax assets:		
Allowance for doubtful accounts	\$25	\$28
Inventory and product return reserves	786	699
Compensation accruals	1,116	963
Accrued liabilities	697	29
Book-over-tax depreciation and amortization	262	274
Foreign net operating loss carryforwards	800	704
U.S. net operating loss carryforwards	6,054	5,156
U.S. credit carryforwards	951	1,053
	10,691	8,906
Valuation Allowance	(10,691)	(8,906)
Total Deferred Income Tax Assets	\$ -	\$ -

The valuation allowance for deferred tax assets increased \$1,785,000 during the year ended December 31, 2012, and decreased \$57,000 during the year ended December 31, 2011. 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 alternative minimum tax credits with expiration years from 2020 to 2032. U.S. net operating loss carryforwards are \$17,804,000 at December 31, 2012 with expiration years from 2020 to 2032. 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 Dec. 31,	
	2012	2011
(in thousands)		
Unrecognized tax benefits, opening balance	\$113	\$98
Prior period tax position increases	19	5
	-	10
		88



Additions based on tax positions related to  
current year

Unrecognized tax benefits, ending balance	\$132	\$113
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Historically, we have not incurred any interest or penalties associated with tax matters and no interest or penalties were recognized during 2012. However, 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 2009, 2010, 2011 and 2012 in the United States of America. In addition, tax years from 2000 to 2008 may be subject to examination in the event that we utilize the net operating losses and credit carryforwards from those years in its current or future year tax returns.

#### **NOTE 14 – 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.

During 2012 and 2011, there was one customer, Data Copy Limited at 11% for both years, who accounted for greater than 10% of our consolidated net revenues for the year. Major operations outside the U.S. include sales, engineering and service

support subsidiaries in Germany and China. At December 31, 2012, three customers, Data Copy Limited, Delphi and Jabil each accounted for more than 10% of our consolidated accounts receivable balance. At December 31, 2011, there was one customer, Panasonic, which represented 10% of our total consolidated accounts receivable balance.

The following tables provide summary operating information by geographic area:

(in thousands)	Year Ended Dec. 31,	
	2012	2011
Net sales:		
U.S.	\$2,835	\$2,724
Europe	6,763	11,025
Rest of World	7,487	12,917
	\$17,085	\$26,666
Included in Europe and Rest of World net sales are the following significant balances:		
Germany	\$4,061	\$6,717
China	\$2,721	\$3,917
Operating income (loss):		
U.S.	(\$4,405)	(\$1,567)
Europe	(1,417)	832
Rest of World	(1,119)	2,196
	(\$6,941)	\$1,461
Identifiable assets:		
U.S.	\$6,865	\$17,740
Europe	3,690	4,056
Rest of World	8,267	9,549
	\$18,822	\$31,345

#### **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 was 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, 2012. 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. Based on this assessment we concluded that, as of December 31, 2012, 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 non-accelerated filers 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.

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## **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 22, 2013 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 an updated 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 at <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 21, 2013 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 21, 2013 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, 2012. See Notes 11 and 12 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)	1,578,009	\$4.44	782,958
Equity compensation plans not approved by the security holders			
(3)	275,000	\$1.87	-
Total	1,853,009	\$4.05	782,958

(1) Represents shares of our Common Stock issuable pursuant to the Data I/O Corporation 2000 Stock Incentive Compensation Plan, 1982 Employee Stock Purchase Plan and 1996 Director Fee 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) Represents inducement grants of 200,000 nonqualified stock options and 75,000 restricted stock to Anthony Ambrose as part of his hiring.

**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 2013 Annual Meeting of Shareholders under the caption "Certain Relationships and Related Transactions."

**Item 14. Principle 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 21, 2013. 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 10.6.
- (2) Data I/O Corporation Tax Deferral Retirement Plan and Trust with Great West Financial (formerly Orchard Trust Company). See Exhibits 10.17, 10.18 and 10.19.
- (3) Summary of Amended and Restated Management Incentive Compensation Plan. See Exhibit 10.2.
- (4) Amended and Restated 1983 Stock Appreciation Rights Plan. See Exhibit 10.1.
- (5) Amended and Restated Executive Agreements. See Exhibit 10.9, 10.10 and 10.23.
- (6) 1996 Director Fee Plan. See Exhibit 10.4.
- (7) Letter Agreement with Frederick R. Hume. See Exhibit 10.5.

(8) Data I/O Corporation 2000 Stock Compensation Incentive Plan. See Exhibit 10.7, 10.13 and 10.25.

(9) Form of Option Agreement. See Exhibit 10.8.

(10) Form of Indemnification Agreement. See Exhibit 10.20.

(11) Separation Agreement with Frederick R. Hume. See Exhibit 10.22.

(12) Letter Agreement with Anthony Ambrose. See Exhibit 10.24.

(a)	<b><u>List of Documents Filed as a Part of This Report:</u></b>	<b><u>Page</u></b>
(1)	<u>Index to Financial Statements:</u>	
	Report of Independent Registered Public Accounting Firm	25
	Consolidated Balance Sheets as of December 31, 2012 and 2011	26
	Consolidated Statements of Operations for each of the two years ended December 31, 2012 and December 31, 2011	27
	Consolidated Statements of Comprehensive Income (Loss) for each of the two years ended December 31, 2012 and December 31, 2011	28
	Consolidated Statements of Stockholders' Equity for each of the two years ended	29
	December 31, 2012 and December 31, 2011	
	Consolidated Statements of Cash Flows for each of the two years ended December 31, 2012 and December 31, 2011	30



(2) Index to Financial Statement Schedules:

Schedule II – Consolidated Valuation and Qualifying Accounts

All other schedules not listed above have been omitted because the required information is included 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)).
- 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).
- 4.2 Rights Agreement, dated as of March 31, 1988, between Data I/O Corporation and First Jersey National Bank, as Rights Agent, as amended by Amendment No. 1 thereto, dated as of May 28, 1992 and Amendment No. 2 thereto, dated as of July 16, 1997 (Incorporated by reference to Data I/O's Report on Form 8-K filed on March 13, 1998).

- 4.3 Amendment No. 1, dated as of February 10, 1999, to Rights Agreement, dated as of April 4, 1998, between Data I/O Corporation and ChaseMellon Shareholder Services, L.L.C. as Rights Agent (Incorporated by reference to Exhibit 4.1 of Data I/O's Form 8-A/A dated February 10, 1999).
- 4.4 Amendment No. 2 to Rights Agreement, dated as of April 3, 2008, between Data I/O Corporation and Mellon Investor Services LLC (formerly ChaseMellon Shareholder Services, L.L.C.). (Incorporated by reference to Exhibit 4.3 of Data I/O's Form 8-K dated April 3, 2008).

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)).
- 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 Letter Agreement with Frederick R. Hume dated January 29, 1999. (Incorporated by reference to Exhibit 10.35 of Data I/O's 1999 Annual Report on Form 10-K (File No. 0-10394)).
- 10.6 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).
- 10.7 Amended and Restated 2000 Stock Compensation Incentive Plan dated May 24, 2006 (Incorporated by reference to Data I/O's 2006 Proxy Statement dated April 6, 2006).
- 10.8 Form of Option Agreement (Incorporated by reference to Data I/O's 2004 Annual Report on Form 10-K (File No. 0-10394)).
- 10.9 Amended and Restated Executive Agreement with Frederick R. Hume dated December 31, 2011. (Incorporated by reference to Data I/O's 2011 Annual Report on Form 10K (File No. 0-10394)).
- 10.10 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)).
- 10.11 Lease, Redmond East Business Campus between Data I/O Corporation and Carr Redmond PLCC dated February 28, 2006 (Incorporated by reference to Data I/O's 2005 Annual Report on Form 10K (File No. 0-10394)).
- 10.12 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 10K (File No. 0-10394)).
- 10.13 Amended and Restated 2000 Stock Compensation Incentive Plan approved May 17, 2011 (Incorporated by reference to Data I/O's 2011 Proxy Statement filed April 5, 2011).
- 10.14 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)).

- 10.15 Patent Purchase Agreement (Incorporated by reference to Data I/O's Current Report on Form 8-K filed on March 25, 2008)).
- 10.16 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).
- 10.17 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 10K (File No. 0-10394)).



- 10.18 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 10K (File No. 0-10394)).
- 10.19 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 10K (File No. 0-10394)).
- 10.20 Form of Indemnification Agreement. (Incorporated by reference to Data I/O's 2010 Annual Report on Form 10K (File No. 0-10394)).
- 10.21 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).
- 10.22 Separation Agreement with Frederick R. Hume dated March 1, 2012 (Incorporated by reference to Data I/O's Current Report on Form 8-K filed on March 2, 2012).
- 10.23 Executive Agreement with Anthony Ambrose dated October 25, 2012.
- 10.24 Letter Agreement with Anthony Ambrose (Incorporated by reference to Data I/O's Current Report on Form 8-K filed on October 29, 2012).
- 10.25 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).
- 21.1 Subsidiaries of the Registrant
- 23.1 Consent of Independent Registered Public Accounting Firm

31.1 Chief Executive Officer Certification  
31.2 Chief Financial Officer Certification

32 **Certification – Section 906:**

32.1 Chief Executive Officer Certification  
32.2 Chief Financial Officer Certification

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

## **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 27, 2013  
/s/Anthony Ambrose

By:

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> <u>March 27, 2013</u>	President and Chief Executive Officer
Anthony Ambrose	(Principal Executive Officer), Director
By: <u>/s/Joel S. Hatlen</u> <u>March 27, 2013</u>	Chief Financial Officer
Joel S. Hatlen	Vice President of Finances
	Secretary, Treasurer
	(Principal Financial and Accounting Officer)
By: <u>/s/Douglas W. Brown</u> <u>March 27, 2013</u>	Director
Douglas W. Brown	
By: <u>/s/Kenneth B. Myer</u> <u>March 27, 2013</u>	Director
Kenneth B. Myer	
By: <u>/s/Brian T. Crowley</u> <u>March 27, 2013</u>	Director
William R. Walker	
By: <u>/s/Alan B. Howe</u> <u>March 27, 2013</u>	Director
Alan B. Howe	
By: <u>/s/Mark J. Gallenberger</u> <u>March 27, 2013</u>	Director
Mark J. Gallenberger	

**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, 2011:				
Allowance for bad debts	\$138	(\$27)	\$4 <sup>(1)</sup>	\$115
Year Ended December 31, 2012:				
Allowance for bad debts	\$115	(\$26)	\$ - <sup>(1)</sup>	\$89
<sup>(1)</sup> Uncollectable accounts written off, net of recoveries				

**EXHIBIT 21.1**

**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:

<b>Name of Subsidiary</b>	<b>State or Jurisdiction of Organization</b>	<b>Percentage of Voting Securities Owned</b>
Data I/O International, Inc.	Washington	100%
RTD, Inc.	Washington	100%
Data I/O FSC International, Inc.	Territory of Guam	100%
Data I/O Canada Corporation	Canada	100%
Data I/O China, Ltd.	Hong Kong, China	100%
Data I/O GmbH	Germany	100%
Data I/O Electronics (Shanghai) Co., Ltd.	China	100%
Data I/O Programação de Sistemas Ltda.	Brazil	100%



**Exhibit 23.1**

Consent of Grant Thornton LLP, Independent Registered Public Accounting Firm

We have issued our report dated March 27, 2013, with respect to the consolidated financial statements and schedule included in the Annual Report of Data I/O Corporation on Form 10-K for the year ended December 31, 2012. We hereby consent to the incorporation by reference of said report in the Registration Statements of Data I/O Corporation on Form 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 and 333-175840) and on Form S-3 (File No. 333-121566).

/s/Grant Thornton LLP

Seattle, Washington  
March 27, 2013



**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;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this 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 27, 2013

/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;
- 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)) 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;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external 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 27, 2013

/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

§ 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, 2012 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 27, 2013



**Exhibit 32.2**

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, 2012 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
- (2) 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 27, 2013





**Exhibit 10.23**

**AMENDED AND RESTATED  
EXECUTIVE AGREEMENT  
FOR  
DATA I/O CORPORATION**

This Amended and Restated Agreement (the "Agreement") is entered into this 25 day of October, 2012, by and between DATA I/O CORPORATION ("the Company") and Anthony Ambrose ("Executive"). Executive is an at-will employee of the Company. The parties wish to provide Executive with severance benefits if Executive's employment is terminated in connection with a change in control in the Company and other payments in connection with a change of control. At the time of the execution of the original agreement, the Executive entered into the Company's form of Confidentiality and Non-Competition Agreement for executive officers.

NOW, THEREFORE, in consideration of the foregoing recitals and the covenants and conditions contained herein, the parties hereby agree as follows:

1. Change of Control.

(a) If, within the period commencing 80 days prior to the date of occurrence (the "Event Date") of a Control Event and ending on the first anniversary of the Event Date (the "Window"), the Company terminates Executive's employment (other than for Cause) or Executive resigns for Good Reason, the Company shall pay to Executive (1) the Severance Payment in immediately available funds and (2) expenses incurred, up to Twenty Thousand Dollars (\$20,000) for outplacement services or other job search expenses. If such termination occurs prior to the Control Event, the Severance Payment is due on the fifth day following the Event Date; if such termination occurs on or subsequent to the Event Date, the Severance Payment is due on the twentieth business day following the date of termination (the "Termination Date") or at a later date in order to comply with the provisions of Section 409A of the Internal Revenue Code. Outplacement expenses under Section 1(a)(2) above must be incurred and shall be paid no later than December 31st of the second calendar year following the calendar year of the Executive's termination of employment. For purposes of this

Agreement, termination from employment shall mean a “separation from service” as defined under the default rules under the final Section 409A regulations.

(b) The Severance Payment shall be determined pursuant to the following formula:

$$[(B-A)/365] \times (C + D) \quad \text{where}$$

A = the number of days of continued full-time employment of Executive by the Company following the Event Date

$$B = 1 \times 365$$

C = Executive's annual base salary as of the Termination Date

D = the average of all cash bonuses that Executive received or is entitled to receive regarding the three most recent fiscal years of the Company during which Executive was employed by the Company in his or her current position for the entire year;

provided however, that unless the Company, its successors or assigns gives Executive six (6) months advance written notice of termination, the Severance Payment shall not be less than the amount computed as follows:  $(0.5) \times (C + D)$ .

(c) In addition to any payments which may be required pursuant to Section 1(a), upon the occurrence of a Control Event, the Company shall pay to Executive the Control Event Payment in immediately available funds. The Control Event Payment is due on the closing of the Control Event. The Control Even Payment shall equal the product of (1) 0.5 and (2) Executive's annual base salary as of the date immediately prior to the Control Event.

(d) Each of the following shall constitute a "Control Event":

(1) the acquisition of Common Stock of the Company (the "Common Stock") by any "Person" (as such term is defined in Section 1.21 of the Rights Agreement dated as of April 4, 1998 between the Corporation and Chase Mellon Shareholder Services L.L.C. and with Amendment No.1 dated as of February 10, 1999 and Amendment No. dated as of April 3, 2008 (the "Rights Plan"), together with all Affiliates and Associates (as such terms are defined in Section 1.5 of the Rights Plan) of such Person, such that such Person becomes, after the date of this Agreement, the Beneficial Owner (as defined in the Rights Plan) of a majority of the shares of Common Stock then outstanding, but shall not include the Company, any subsidiary of the Company, any employee benefit plan of the Company or of any subsidiary of the Company, or any Person or entity organized, appointed or established by the Company for or pursuant to the terms of any such employee benefit plan; or

(2) the approval by the Company's shareholders (or, if later, approval by the shareholders of any Person) of any merger, consolidation, reorganization or other transaction providing for the conversion or exchange of more than fifty percent (50%) of the outstanding shares of Common Stock into securities of any Person, or cash, or property, or a combination of any of the foregoing; and

(e) Each of the following shall constitute "Good Reason", provided that it occurs during the Window, and provided further that Executive must provide notice to the Company within sixty (60) days of the existence of such condition and the Company will have thirty (30) days from receipt of such notice to remedy the condition. If the condition is not remedied within such 30 day period, the following conditions will constitute "Good Reason":

(1) the material diminution of Executive's position, duties, responsibilities or status with the Company or its successor, as compared with the position, duties, responsibilities or status of Executive with the Company immediately prior to the Event Date, except in connection with the termination of Executive for Cause;

(2) the Company's assignment of Executive on a substantially full-time basis to work at a location where the distance between the new location and Executive's principal residence is at least 35 miles greater than the distance between the former location and such residence; provided, however, that this paragraph shall not apply to travel in the furtherance of the Company's business to an extent substantially consistent with Executive's business travel obligations as of the date hereof;

(3) the Company's failure to obtain an assumption of the obligations of the Company to perform this Agreement by any successor to the Company;

(4) any material reduction in Executive's base salary, or a material reduction in benefits payable to Executive or failure of the Company to pay Executive any earned salary, bonus or benefits except with the prior written consent of Executive;

(5) the exclusion or limitation of Executive from participating in some form of variable compensation plan which provides the Executive the opportunity to achieve a level of total compensation (base salary plus variable compensation) consistent with what the Executive had the opportunity to earn at the Event Date; or

(6) any demand by any director or officer of the Company that Executive take any action or refrain from taking any action where such action or inaction, as the case may be, would violate any law, rule, regulation or other governmental pronouncement, court order, decree or judgment, or breach any agreement or fiduciary duty.

(f) Each of the following shall constitute "Cause":

(1) any violation by Executive of any material obligation under this Agreement or the attached Confidentiality and Non-Disclosure Agreement;

(2) any action or failure to act by Executive which causes the Company to incur significant monetary damages;

(3) conviction for commitment of a felony;

(4) any violation of law which has a material, adverse effect on the Company;

(5) habitual abuse of alcohol or a controlled substance;

(6) theft or embezzlement from the Company;

(7) repeated unexcused absence from work for reasons unrelated to short-term illnesses;

(8) the failure by Executive substantially to achieve personal performance goals reasonably established by the board of directors or any officer to whom he/she reports other than where such failure is substantially attributable to factors beyond control of Executive;

(9) Disability of Executive (as defined below); and

(10) repeated failure or refusal by Executive to carry out the reasonable directives, orders or resolutions of the Company's Board of Directors or any officer to whom he/she reports.

(g) "Disability" shall mean any physical, mental or other health condition which substantially impairs Executive's ability to perform his/her assigned duties for 90 days or more in any 180 day period or that can be expected to result in death. Any disagreement as to whether Executive is disabled shall be resolved by a

physician selected by the Company after an examination of Executive. Executive hereby consents to such physical examination and to the examination of all medical records of Executive necessary, in the judgment of the examining physician, to make the determination of disability.

(h) Notwithstanding any other provision of this Agreement to the contrary, in the event that any severance or other payment, benefit or right payable or accruing to Executive hereunder or under the Company's 2000 Stock Compensation Incentive Plan or Amended and Restated 1986 Stock Option Plan ("Option Plan") would constitute a "parachute payment" as defined in Section 280G(b)(2) of the Internal Revenue Code of 1986, as amended (the "Code"), then the total amount of severance and other payments or benefits payable to Executive hereunder and under the Option Plan which is deemed to constitute a "parachute payment" shall not exceed and shall, if necessary, be reduced to an amount (the "Revised Severance Payment") equal to 2.99 times Executive's "base amount" as defined in Code Section 280G(b)(3). In the event of a disagreement between the Company and Executive as to whether the provisions of Code section 280G are applicable or the amount of the Revised Severance Payment, such determination shall be made by the Company's independent public accountants or, if such firm is unable or unwilling to render such a determination, then by a law firm mutually acceptable to Executive and the Company. All costs relating to such determination shall be borne by the Company. The Company and the Executive shall cooperate in good faith to make the determination required by this Section 1(h) by mutual agreement not later than the later of: (i) the fifth day preceding the date that the Severance Payment is or would be due or (ii) the earlier of (x) the tenth day following the expiration of any period of accelerated vesting of options to purchase the Company's Common Stock provided by Section 5(n) of the Option Plan or (y) the tenth day following the date of exercise by Executive of his or her last remaining option which was exercisable solely due to the application of Section 5(n) of the Option Plan. Pending the final calculation of the Severance Payment or Revised Severance Payment, the Company shall pay the amounts described under subsection (b) above at the time and in the manner provided herein; provided that, pending such determination, such payments shall be reduced by such amounts as the Company estimates in good faith to be necessary to satisfy its tax (including excise tax) withholding obligations and effect the reduction in the amount of the Severance Payment, as contemplated by this Subsection 1(h). The aggregate amount of any compensation actually paid or provided to Executive under the terms of this Agreement and in excess of the Revised Severance Payment shall be deemed, to the extent of such excess, a loan to Executive payable upon demand and bearing interest at the rate of 8% per annum.

2. Confidentiality and Non-Competition Agreement. In consideration of the obligations undertaken by the Company pursuant to this Agreement, contemporaneously with the execution of this Agreement, Executive and the Company have entered into the form of Confidentiality and Non-Competition Agreement attached hereto as Exhibit A and each agreement shall be effective only if both agreements have been executed.

3. Term of Agreement.

The Company's obligations under Section 1 of this Agreement shall expire with respect to Control Events occurring on or after the third anniversary of the date of this Agreement unless the term hereof is extended by the Board of Directors of the Company by a majority vote of those members of the Board who are not parties to this or a similar agreement.

4. At Will Employment. Unless and to the extent otherwise agreed by the Company and Executive in a separate written employment agreement, Executive's employment shall be "at will", with either party permitted to terminate the employment at any time, with or without cause. No term of any employment agreement between the Company and Executive shall be construed to conflict with, lessen or expand the obligations of the parties under this Agreement.



5. Notices. All notices and other communications called for or required by this Agreement shall be in writing and shall be addressed to the parties at their respective addresses stated below or to such other address as a party may subsequently specify by written notice and shall be deemed to have been received (i) upon delivery in person, (ii) five days after mailing it by U.S. certified or registered mail, return receipt requested and postage prepaid, or (iii) two days after depositing it with a commercial overnight carrier which provides written verification of delivery:

To the Company: 6464 185<sup>th</sup> Avenue N.E., Suite 101

Redmond, Washington 98052

Attention: General Counsel or Corporate Secretary

To Executive: Anthony Ambrose

13459 NW Countryview Way

Portland, OR 97229-4467

6. Withholding. Except as described in subsection 1(h) of this Agreement, all payments due to and all benefits to be provided to Executive hereunder shall be subject to reduction for any applicable withholding taxes, including excise taxes.

7. Assignment. Executive's rights and duties hereunder are personal to Executive and are not assignable to others, but Executive's obligations hereunder will bind his/her heirs, successors, and assigns. The Company may assign its rights under this Agreement in connection with any merger or consolidation of the Company or any sale of all or any portion of the Company's assets (including, without limitation, any division or product line), provided that any such successor or assignee expressly assumes in writing the Company's obligations hereunder.

8. No Duty to Mitigate. Executive shall not be required to mitigate the amount of any payment made or benefit provided hereunder. The Company may offset any payment due hereunder by the amount of damages to the Company resulting from any breach of this

Agreement by Executive.

9. General. This Agreement constitutes the exclusive agreement of the parties with respect to the subject matter hereof and supersedes all prior agreements or understandings of the parties. No waiver of or forbearance to enforce any right or provision hereof shall be binding unless in writing and signed by the party to be bound, and no such waiver or forbearance in any instance shall apply to any other instance or to any other right or provision. This Agreement will be governed by the local laws of the State of Washington without regard to its conflicts of laws rules to the contrary. The parties hereby consent to the exclusive jurisdiction and venue of the state and federal courts sitting in King County, Washington for all matters and actions arising under this Agreement. The prevailing party shall be entitled to reasonable attorneys' fees and costs incurred in connection with such litigation. No term hereof shall be construed to limit or supersede any other right or remedy of the Company under applicable law with respect to the protection of trade secrets or otherwise. If any provision of this Agreement is held to be invalid or unenforceable to any extent in any context, it shall nevertheless be enforced to the fullest extent allowed by law in that and other contexts, and the validity and force of the remainder of this Agreement shall not be affected thereby.

IN WITNESS WHEREOF, the parties have caused this Agreement to be signed as of the date first above written.

DATA I/O CORPORATION

EXECUTIVE:

By: /s/Joel S. Hatlen

Signature: /s/Anthony Ambrose

Name: Joel Hatlen

Name: Anthony Ambrose

Its: Vice President / CFO

**Exhibit A**

**CONFIDENTIALITY AND NON COMPETITION AGREEMENT  
FOR  
DATA I/O CORPORATION**

This Agreement is entered into effective this 25th day of October 2012, by and between DATA I/O CORPORATION ("the Company") and Anthony Ambrose ("Executive"). Executive is an at-will employee of the Company. In consideration of entering into an agreement to provide Executive with severance benefits if Executive's employment is terminated in connection with a change in control in the Company, Executive promises, on the terms set forth herein, at all times to protect the Company's proprietary information and to not compete with the Company following termination of Executive's employment in connection with a change in control.

NOW, THEREFORE, in consideration of the foregoing recitals and the covenants and conditions contained herein, the parties hereby agree as follows:

1. Intellectual Properties.

(a) All ownership, copyright, patent, trade secrecy, and other rights in all works, programs, software, fixes, routines, inventions, ideas, designs, manuals, improvements, discoveries, processes, customer lists or other properties (the "Intellectual Properties") made or conceived by Executive during the term of his/her employment by the Company shall be the rights and property solely of the Company, whether developed independently by Executive or jointly with others, and whether or not developed or conceived during regular working hours or at the Company's facilities, and whether or not the Company uses, registers, or markets the same.

(b) In accordance with the Company's policy and Washington law, this Agreement (other than Subsection 1(c)) does not apply to, and Executive has no obligation to assign to the Company, any invention for which no Company trade secrets and no equipment, supplies, or facilities of the Company were used and which was developed entirely on Executive's own time, unless: (i) the invention relates directly to the business of the Company, (ii) the invention relates to actual or demonstrably anticipated research or development work of the Company, or (iii) the invention results from any work performed by

Executive for the Company.

(c) If and to the extent that Executive makes use, in the course of his/her employment, of any items or Intellectual Properties previously developed by Executive or developed by Executive outside of the scope of this Agreement, Executive hereby grants the Company a nonexclusive, royalty-free, perpetual, irrevocable, worldwide license (with right to sublicense) to make, use, sell, copy, distribute, modify, and otherwise to practice and exploit any and all such items and Intellectual Properties.

(d) Executive will assist the Company as reasonably requested during and after the term of his/her employment to further evidence and perfect, and to enforce, the Company's rights in and ownership of the Intellectual Properties covered hereby, including without limitation, the execution of additional instruments of conveyance and assisting the Company with applications for patents or copyright or other registrations.

## 2. Trade Secrets and Confidential Information.

(a) Executive acknowledges that the Company's business and future success depends on the preservation of the trade secrets and other confidential information of the Company and its suppliers and customers (the "Secrets"). The Secrets may include, without limitation, existing and to-be-developed or acquired product designs, new product plans or ideas, market surveys, the identities of past, present or potential customers, business and financial information, pricing methods or data, terms of contracts with present or past customers, proposals or bids, marketing plans, personnel information, procedural and technical manuals and practices, servicing routines, and parts and supplier lists proprietary to the Company or its customers or suppliers, and any other sorts of items or information of the Company or its customers or suppliers which are not generally known to the public at large. Executive agrees to protect and to preserve as confidential during and after the term of his/her employment all of the Secrets at any time known to

Executive or in his/her possession or control (whether wholly or partially developed by Executive or provided to Executive, and whether embodied in a tangible medium or merely remembered).

(b) Executive shall mark all items containing any of the Secrets with prominent confidentiality notices acceptable to the Company. Executive shall neither use nor allow any other person to use any of the Secrets in any way, except for the benefit of the Company and as directed by Executive's supervisor. All material containing or disclosing any portion of the Secrets shall be and remain the property of the Company, shall not be removed from the Company's premises without specific consent from an officer of the Company, and shall be returned to the Company upon the termination of Executive's employment or the earlier request Executive's supervisor. At such time, Executive shall also assemble all materials in his possession or control which contain any of the Secrets, and promptly deliver such items to the Company.

3. Authority and Non-Infringement. Executive warrants that any and all items, technology, and Intellectual Properties of any nature developed or provided by Executive under this Agreement and in any way for or related to the Company will be original to Executive and will not, as provided to the Company or when used and exploited by the Company and its contractors and customers and its and their successors and assigns, infringe in any respect on the rights or property of Executive or any third party. Executive will not, without the prior written approval of the Company, use any equipment, supplies, facilities, or proprietary information of any other party. Executive warrants that Executive is fully authorized to enter into employment with the Company and to perform under this Agreement, without conflicting with any of Executive's other commitments, agreements, understandings or duties, whether to prior employers or otherwise. Executive will indemnify the Company for all losses, claims, and expenses (including reasonable attorneys' fees) arising from any breach of by him/her of this Agreement.

4. Non-competition and Non-solicitation.

(a) Executive agrees that during the term of his/her employment with the Company and, if Executive receives the Severance Payment (as defined below), until the first anniversary of the Termination Date (as defined below), he/she will not in any capacity directly or indirectly engage in, assist others to engage in or own a material interest in any business or activity that is, or is preparing to be, in competition with the Company with respect to any product or service sold or service provided by the Company up to the time of termination of employment in any geographical area in which at the time of termination of employment such product or service is sold or actively is engaged in. For the purposes of this Agreement, the terms "Severance Payment" and "Termination Date" shall have the meanings assigned to them in the Executive Agreement (as defined in Section 6 below).

(b) Executive further agrees that during the period stated above, he/she will not directly or indirectly call on, reveal the name of, or otherwise solicit, accept business from or attempt to entice away from the Company any actual or identified potential customer of the Company, nor will he/she assist others in doing

so. Executive further agrees that he/she will not, during the period stated above, encourage or solicit any other employee or consultant of the Company to leave such employment for any reason, nor will he/she assist others to do so.

(c) Executive acknowledges that the covenants in this section are necessary and reasonable to protect the Company in the conduct of its business and that compliance with such covenants will not prevent him/her from pursuing his/her livelihood. However, should any court find that any provision of such covenants is unreasonable, invalid or unenforceable, whether in period of time, geographical area, or otherwise, then in that event the parties hereby agree that such covenants shall be interpreted and enforced to the maximum extent which the court deems reasonable.

5. Remedies. The harm to the Company from any breach of Executive's obligations under this Agreement may be difficult to determine and may be wholly or partially irreparable, and Executive agrees that such obligations may be enforced by injunctive relief and other appropriate remedies, as well as by damages. If any bond from the Company is required in connection with such enforcement, the parties agree that a reasonable value of such bond shall be \$5,000. Any amounts received by Executive or by any other through Executive in breach of this Agreement shall be held in constructive trust for the benefit of the Company.

6. Executive Agreement. In consideration of the obligations undertaken by Executive pursuant to this Agreement, contemporaneously with the execution of this Agreement, Executive and the Company shall enter into the form of Executive Agreement to which this Agreement is attached (the "Executive Agreement"), and each agreement shall be effective only if both agreements have been executed.

7. At Will Employment. Unless and to the extent otherwise agreed by the Company and Executive in a separate written employment agreement, Executive's employment shall be "at will", with either party permitted to terminate the employment at any time, with or without cause. No term of any employment agreement between the Company and Executive shall be construed to conflict with or lessen Executive's obligations under this Agreement.

8. Notices. All notices and other communications called for or required by this Agreement shall be in writing and shall be addressed to the parties at their respective addresses stated below or to such other address as a party may subsequently specify by written notice and shall be deemed to have been received (i) upon delivery in person, (ii) five days after mailing it by U.S. certified or registered mail, return receipt requested and postage prepaid, or (iii) two days after depositing it with a commercial overnight carrier which provides written verification of delivery:

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Redmond, Washington 98052

Attention: General Counsel and Corporate Secretary

To Executive: Anthony Ambrose

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9. Assignment. Executive's rights and duties hereunder are personal to Executive and are not assignable to others, but Executive's obligations hereunder will bind his/her heirs, successors, and assigns. The Company may assign its rights under this Agreement in connection with any merger or consolidation of the Company or any sale of all or any portion of the Company's assets (including, without limitation, any division or product line), provided that any such successor or assignee expressly assumes in writing the Company's obligations under the Executive Agreement.

10. General. This Agreement constitutes the exclusive agreement of the parties with respect to the subject matter hereof and supersedes all prior agreements or understandings of the parties. No waiver of or forbearance to enforce any right or provision hereof shall be binding unless in writing and signed by the



party to be bound, and no such waiver or forbearance in any instance shall apply to any other instance or to any other right or provision. This Agreement will be governed by the local laws of the State of Washington without regard to its conflicts of laws rules to the contrary. The parties hereby consent to the exclusive jurisdiction and venue of the state and federal courts sitting in King County, Washington for all matters and actions arising under this Agreement. The prevailing party shall be entitled to reasonable attorneys' fees and costs incurred in connection with such litigation. No term hereof shall be construed to limit or supersede any other right or remedy of the Company under applicable law with respect to the protection of trade secrets or otherwise. If any provision of this Agreement is held to be invalid or unenforceable to any extent in any context, it shall nevertheless be enforced to the fullest extent allowed by law in that and other contexts, and the validity and force of the remainder of this Agreement shall not be affected thereby.

IN WITNESS WHEREOF, the parties have caused this Agreement to be signed as of the date first above written.

DATA I/O CORPORATION

EXECUTIVE:

By: /s/Joel S. Hatlen

Signature: /s/Anthony Ambrose

Its: Vice President / CFO

Name, printed: Anthony Ambrose