# DATA I/O CORP Form 10-K March 31, 2008

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

### **FORM 10-K**

(Mark One)

### [X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended **December 31, 2007** 

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)

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

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

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

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

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

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

Indicate by check mark 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. Yes No

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 Small

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 of the registrant as of June 30, 2007: \$28,660,807

Shares of Common Stock, no par value, outstanding as of March 20, 2008: 8,786,211

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement relating to its May 19, 2008 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, 2007

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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<sup>®</sup> 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") 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") so that the ICs will function as desired in the customer's electronic product. They are an important tool for the electronics industry experiencing growing use of programmable ICs. Data I/O markets and distributes our programming systems worldwide, and is the global leader in this market. Data I/O was incorporated in the State of Washington in 1969 and its business was founded in 1972.

*Data I/O Mission*.Data I/O's mission is to design and deliver innovative customer-focused programming solutions, which enable customers to manage their firmware supply chain, protect their intellectual property, get their products to market faster, and reduce costs in their process. We align our products and services to make programming easy, delight our customers and satisfy their whole product needs.

*Helping Customers Manage their Firmware Supply Chain.* Much of the innovation and competitive advantage of today's electronic products comes from the software buried inside the product, which is commonly referred to as *"firmware.*" Companies use firmware to differentiate their products from their competitors' products, constantly writing new code to add features. This allows them to build multiple models with identical hardware and many versions of firmware, all on one production line. Any improvement in production efficiency boosts the profitability of all products on that line. Many original equipment manufacturers ("OEMs") now outsource production to specialists in electronic manufacturing services ("EMS") to maximize the profit impact from highly efficient production. The challenges of managing the firmware supply chain remain, however, and can even increase with this additional interface. Our systems allow our customers – both OEM and EMS companies – to build products with the exact firmware features that consumers specify, virtually real-time with the latest software release. We help our customers eliminate inventory risks, delays, rework, and lost market opportunities while enabling them to better serve their customers.

*Connected Strategy*. There are many providers of device programming tools on the market today. However, experienced design, test and manufacturing engineering teams need a comprehensive approach to process management that will assure the integrity of the product data files from design through manufacturing, assuring that the production line builds the product in the most cost-effective way, precisely as designed. Data I/O solutions provide a consistent device programming methodology from design through prototype and new product introduction and finally in the high volume manufacturing phase. We call this approach the "Connected Strategy". Data I/O's Connected Strategy leverages network capable products to easily move the customer's intellectual property securely up and down the supply chain.

*Application Innovation Strategy.* Because there are many providers of device programming tools, programming technology is now widely available and is even being provided directly to customers by the semiconductor firms. Activities that provided the profit in the past such as the sale of generic programming equipment and adapters are threatened by many readily available alternatives. For this reason, we have introduced our new applications innovation strategy. This strategy provides complete solutions to target customer's business problems. These solutions will focus more on customer applications than what are products have in the past. These solutions will have a larger software element, may involve third-party components, and in many cases, will be developed to address a specific customer's requirements. We believe by adding these features to our strategic product platforms, we will be able to set ourselves apart from other product suppliers and elevate our relationship with our customers to a partner level.

*Business Restructuring*. During 2005, we took restructuring related charges of \$96,000 primarily related to severance and completing actions that had been started in the second half of 2004. This aligned management operations with the changes made in 2004 to control costs in North America and Europe and the need to build staff serving China and Eastern Europe.

During the second half of 2006, as part of our additional effort to reduce expenses, we incurred restructuring charges of approximately \$152,000 in the third quarter and \$39,000 in the fourth quarter of 2006. The restructuring charges are primarily related to severance charges incurred at our Redmond, Germany and China offices. In view of our declining margins and operating results during the first and second quarters of 2006, actions were taken to reduce expenses and improve margins.

We continued our restructuring activities during the first and second quarters of 2007, to further improve our operating results and the effectiveness of our sales and marketing organization and sales channels. During the first quarter of 2007, we recorded restructuring charges of approximately \$200,000 primarily related to severance charges. During the second quarter of 2007, we recorded an additional \$632,000 of restructuring charges. These actions included re-engineering some internal processes, integrating some activities, transferring some activities to our lower cost base of operations in China, reducing resources applied to declining legacy products, moving some engineering positions to production, reducing the number of taxable entities, outsourcing some functions such as payroll, combining some positions, eliminating some functions, and shifting some responsibilities and resources to our channels. During the third quarter of 2007, we recorded a net expense reversal of \$107,000 comprised of \$54,000 of additional expense, primarily relating to facilities, and a reversal of \$161,000 of previously accrued severance primarily because certain employees who had been scheduled for termination had their termination notice rescinded. At December 31, 2007, \$8,000 remains accrued and is expected to be paid out during the first quarter of 2008.

### **Industry Background**

Data I/O enables companies to improve productivity and reduce costs by providing device programming solutions that enable our customers to take intellectual property (design and data files) and program it into memory, microcontroller and logic devices. Companies that design and manufacture electronic products that utilize programmable devices purchase these solutions from us. OEMs and their EMS contract manufacturers, our primary customers, design and manufacture a broad range of electronic products for both consumer and industrial use. Data I/O also provides services related to hardware support, system installation and repair, and device programming.

According to several industry reports, there continues to be forecasted growth of semiconductors used in consumer electronic products, automotive electronics, and industrial controls which we believe should continue to drive demand for programming equipment and services. Programmable devices continue to be significant and growing segments of the semiconductor industry according to several published industry reports. Flash memory and programmable micro-controllers are typical types of these devices. Programmable devices offer advantages to the electronic product designer allowing them to bring products to market more quickly and inexpensively than using fixed-function devices, and can offer the advantage of simpler rapid product upgrades. Programmable devices also offer attractive functionality to the user of the electronic product, such as storing personal information or customizing product functionality. As a result, use of programmable devices is growing rapidly in both high-volume consumer electronic products and more complex electronic systems.

More than 70 semiconductor manufacturers offer thousands of different programmable devices. The technology trends driving the programmable device market result in a broad range of requirements for programming information into these devices. Programmable memory devices continue to have higher density and occupy smaller circuit board space. Programmable microcontroller devices are now more prevalent because semiconductor vendors are standardizing their manufacturing process continuing the trend away from fixed or "masked" microcontrollers and enhancing their attractiveness by increasing the device memory content, instead of using external memory devices. These technology advances require advanced programming equipment like Data I/O manufactures.

Our automated programming systems integrate programming and handling functions into one product solution. Quality conscious customers continue to drive this portion of our business, which includes high-volume manufacturing and high-volume programming center customers.

#### Products

In order to accommodate the expanding variety and quantities of programmable devices being manufactured today, Data I/O offers 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.

Data I/O's line of programming systems includes a broad range of products, systems, modules, and accessories, which we group into two general categories: automated programming systems and non-automated programming systems. We provide automated programming systems in three categories: off-line, in-line, and on-board (also known as In-system Programming). 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.

Within the categories of automated solutions and non-automated systems, Data I/O targets specific solutions at specific market segments. Data I/O optimizes the solution based on the customer's device, process and business needs. Data I/O's flagship programming platform, FlashCORE<sup>™</sup>, has the speed and pricing to provide the best value in the industry, making it the leading choice for high volume production. Data I/O technical teams work closely with semiconductor manufacturers to

actively plan for programming support of new devices and physical packages. The FlashCORE platform is used worldwide to program NOR Flash devices from all providers, including market leaders, Intel, Renesas, Spansion and Toshiba. Data I/O leads the industry in providing solutions for NAND flash programming from Hynix, Micron, Samsung, ST Microelectronics, Toshiba, msystems (SanDisk) DiskOnChip and others. The dynamics of the flash market are changing, blurring the distinction of NAND and NOR technologies and the emergence of converged offerings, including Samsung's OneNAND and Spansion's ORNAND, also supported on FlashCORE systems. Data I/O's strong partnerships with leading semiconductor companies greatly enhance our ability to serve our mutual customers.

Target customers include OEMs and EMSs of electronic consumer products, like the fast-growing portable/wireless devices, cellular handsets and smart appliances. These applications are high volume users of programmable flash memory devices.

In portable electronics products, shrinking form factors are driving the shrinkage of device packages. Manual programming and handling of these tiny packages is increasingly impractical due to quality issues. This trend toward small packages should drive demand for Data I/O's automated programming systems.

Applications targeted for these tiny devices include automotive, consumer appliances, remote controls, medical devices, portable/personal electronics, PC peripherals, hand-held and wearable PCs, GPS systems, telecommunications including phones and pagers, security alarms and sensors.

TaskLink® for Windows provides a universal job set-up tool that intuitively guides users in preparing product data files for programming. TaskLink is also a key element of our Connected Strategy. Leveraging network connectivity, Data I/O's TaskLink provides monitoring and control over programming systems anywhere on the network – providing global companies with greater visibility and control over remote production lines or contract manufacturing processes. In late 2006, Data I/O provided a number of application specific software products and related hardware that were developed in response to customer requirements. The value of our application-software further differentiates Data I/O from other providers.

#### Automated Programming Solutions

Data I/O provides our manufacturing and programming center customers with automated programming systems solutions that include robotic handlers, a variety of programmers, input and output media handling (such as tray stackers, tubes, loaders or taping), and marking solutions. Our ProLINE-RoadRunner<sup>TM</sup> is a unique in-line programming system with programming speed capability, which approaches the speed at which Flash devices can currently accept data. Many of our customers need to program Flash and microcontroller devices in large quantities and very quickly. ProLINE-RoadRunner mounts directly on the assembly machine in the production line (Siemens, Fuji, Universal, Panasonic and Assembleon machines) and delivers programmed parts from reels of blank devices to the production line in a just-in-time fashion. Our ProLINE-RoadRunner eliminates production bottlenecks associated with high-density Flash and microcontroller devices, allowing last minute firmware changes and eliminating programmed part inventories, ultimately streamlining and reducing the customer's production and process costs. ProLINE-RoadRunner enables customers to implement lean processes and is a key element in Data I/O's Connected Strategy, allowing customers and partners to more effectively manage their firmware supply chain. ProLINE-RoadRunner currently retails from \$74,750 to \$130,950, depending on programming capability.

Data I/O's PS family of automated programming solutions offers highly flexible solutions for off-line batch programming. Data I/O can configure PS systems to support not only Flash devices, but also a wide variety of other devices, such as microcontrollers. These systems provide a number of marking, labeling, and input/output options. Most importantly, customers can make changeovers extremely fast. This feature allows the customer to rapidly respond to diverse demands with very little downtime. Customers can optimize the PS family systems for any job to maximize throughput and, when combined with fast changeover times and high reliability, provide the highest levels of output during a production shift. Our PS588 integrates the same FlashCORE programmer we use in our PS288, PS300 FlashCORE, ProLINE-RoadRunner and FlashPAK<sup>™</sup> and builds on our Connected Strategy and common architecture. The PS588 significantly improves throughput and lowers the cost per programmed part. The PS family products range in price from approximately \$153,200 to \$498,000.

Data I/O's automated solutions also include the FLX500, our desktop automated programming and handling system. The FLX500 sets a new standard in the user experience for automation programming systems. Its graphical user interface eliminates the issue of language usage for the operator. It was designed for "plug and play" operation and is based on a highly modular architectural design. The FLX500 significantly reduces

the entry point for users seeking the benefits of automation without the previously assumed need for high volume part consumption. The FLX500 family ranges in price from approximately \$76,000 to \$92,000.

During the fourth quarter of 2007, the Company introduced the Flash Media Duplicator (FLX-FMD). The Flash Media Duplicator is a solution designed to support flash media that uses the SD and MMC file formats for managed NAND, including small format portable media cards, as well as BGA package versions of this technology. Flash Media Duplicator is for OEM users of flash media, either in embedded applications or for duplication of in-box flash cards. The FLX-FMD ranges in price from approximately \$79,000 to \$110,000.

#### Non-Automated Programming Systems

Our line of non-automated programming systems provides solutions for both engineering and low to medium-volume manufacturing customers. Non-automated programming systems require a user to physically handle the devices being programmed. These types of programmers are also sometimes referred to as "manual" or "desktop" programmers. We have three families of non-automated programmers: Sprint, UniSystem and FlashPAK.

Engineering customers typically use single-site programming systems during the prototype phase of a new design, and may purchase inexpensive systems for limited volume device needs or more expensive systems to support more complex devices or a large variety of device packages. Single-site programming systems can perform programming on only one programmable device at a time.

Data I/O offers refurbished universal single socket manual programming solutions through our UniSystem family of programming systems. Our UniSite and 3980xpi programming systems offer the highest levels of signal integrity, which ensure the highest programming standards. Popular in military, aerospace, telecommunications and other mission critical applications, the systems range from approximately \$7,795 to \$24,000.

For more cost constrained or higher volume applications, the Sprint family of products offers excellent value for the money and versatility. The Sprint Quad and Octal programming systems offer 4 and 8 socket universal programming configurations for higher volume applications. The Sprint family of products range in price from under \$1,000 to \$20,000 for the multiple socket solutions.

Our highest volume manual programmer, the FlashPAK, leverages the high-speed proprietary FlashCORE programming technology in the ProLINE-RoadRunner system. We believe FlashPAK, starting at approximately \$8,700, is the world's fastest programming architecture, limited today only by the speed at which Flash devices can accept data. FlashPAK is another key element of Data I/O's connected strategy, providing OEMs and new product introduction facilities with a high performance Flash programming system that can be used to validate designs before moving down the firmware supply chain. For manufacturing applications, the FlashPAK, a high speed, multi-socket, small footprint desktop solution, provides manual programming operations with the highest level of flexibility at the lowest cost per part. Manufacturers that use manual programming because of lower labor costs in areas like Asia find FlashPAK an attractive solution.

Data I/O supports and completes our product offering with a full range of software and device update products and worldwide service and repair capability.

### Customers

Data I/O sells our products to customers worldwide in a broad range of industries, including wireless handset manufacturers and other telecommunication companies, consumer electronics, computers, test and measurement, medical, automotive electronics, transportation, military, aerospace, electronic contract manufacturing, programming centers, and semiconductors. Our principal customers include Elcoteq, Temic Automotive of North America, Research In Motion, Motorola, and BenQ / (Siemens). Our customers either design and/or manufacture

electronic products that incorporate programmable devices or provide device programming services. During 2007, we sold products to over 1,200 customers throughout the world. During 2007, there were no customers that accounted for more than 10% of our 2007 net sales. In 2006, there was one customer, Bright Faith Global Limited (our sales agents in China), that represented approximately 10.6% of our 2006 net sales. In 2005, there were no customers that accounted for more than 10% of our 2006 net sales. In 2005, there were no customers that accounted for more than 10% of our 2005 net sales. In 2007 there were no customers that represented 10% or more of our total consolidated accounts receivable balance as of December 31, 2007. In 2006, there were three customers two of which were distributors that represented 10.1%, 10.2% and 12.0% of our total consolidated accounts receivable balance at December 31, 2006, respectively, and there were no customers that represented 10% or more of our total consolidated accounts receivable balance at December 31, 2005.

Programmable device consumption continues to grow as more electronic product manufacturers take advantage of the flexibility and cost effectiveness of programmable memory, microcontroller and logic devices. Electronic products today utilize programmable technology in one form or another, from microcontrolled home appliance devices to set top boxes and wireless devices, which use increasingly vast amounts of memory for Internet connectivity and new leading edge features. Our customers come from virtually all industries manufacturing electronic products, and include the consumer electronic products, cell phone, personal data assistants ("PDAs") and other wireless device manufacturers, home entertainment product sectors, aerospace and military applications, global positioning systems, the personal computer ("PC") and the PC peripheral industry, automotive electronics and industrial automation and control.

*Flash memory growth.* The Flash memory customer segment is experiencing some of the most impressive growth of all programmable devices. As cell phones, PDAs, games consoles, set top boxes and other consumer devices become more capable, powerful and compact, the demand for Flash units and megabytes continues to grow.

*Microcontroller growth.* As the demand for smarter electronic devices increases, demand for greater numbers of microcontroller devices increases. Many household appliances today contain a microcontroller to control the critical functions of the product and provide new features. Examples of these appliances include toasters, refrigerators, garage door openers and even thermostats. This growth creates new market opportunities for us and we have added support for these devices in our FlashCORE architecture. In addition, the number of microcontrollers in automotive electronic applications is growing rapidly, with some cars having as many as 80 or more microcontrollers that control functions from airbag and ABS systems to air conditioning, information centers and entertainment, navigation and communication systems. We are also targeting the automotive segment as a critical and growing target segment for our solutions.

#### **Geographic Markets and Distribution**

Data I/O markets and sells 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.

Sales of Data I/O's semiconductor programming equipment products requiring installation by us that is other than perfunctory were previously recorded when installation was complete, or at the later of customer acceptance or installation, if an acceptance clause is specified in the sales terms. After we 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 each of the multiple deliverables has an established fair market value pursuant to Emerging Issues Task Force ("EITF") 00-21, Data I/O began in the third quarter of 2005 recognizing revenue for these products at the time of shipment if all of the other criteria for revenue recognition exist in accordance with Staff Accounting Bulletin ("SAB") 104, Revenue Recognition. Revenue for the undelivered installation service remains deferred at time of shipment and is recognized upon completion of the installation.

Revenue for products where installation is considered perfunctory continues to be recognized at the time of shipment. 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. We recognize 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.

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 a direct telesales organization. Our U.S. independent sales representatives obtain orders on an agency basis, with shipments made directly to the customer by Data I/O. Net sales in the United States for 2007, 2006, and 2005 were \$4,925,000, \$6,407,000, and \$6,386,000, respectively.

Foreign Sales

Foreign sales represented approximately 82%, 78%, and 78%, of net sales of our programming systems in 2007, 2006, and 2005, respectively (see Note 15of "Notes to Consolidated Financial Statements"). We make foreign sales through our wholly-owned subsidiaries in Germany, China, Brazil and Canada, as well as through independent distributors and sales representatives located in 35 other countries. Our independent foreign distributors purchase Data I/O 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 foreign sales for 2007, 2006, and 2005 were \$21,827,000, \$22,386,000, and \$21,935,000, respectively. We determine total foreign 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. Foreign 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.

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 foreign sales. We cannot predict the effect of such factors on our business.

#### 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 inside analysis, we estimate that the total number of programming systems sold during 2007 was similar to 2006 and 2005 where we determined the total sales to have been approximately \$110 million, with Data I/O capturing an estimated 27 - 30% of the global market.

Competitive factors often include prices, features, device support and programming speed, as the programming process impacts more on the major manufacturers' total production process. However, competitive factors are changing. The added value for customers is becoming the whole product solution that fits the customer's business processes. As an example, ProLINE-RoadRunner offers a unique solution, which best addresses the customer's process needs in high volume Flash applications. To this extent, the value proposition of this specific programming solution is very different from traditional solutions.

Therefore, addressing customers' process needs is critical to increasing the opportunity for programming solutions beyond the current amount in this market niche. We estimate that customers are spending between \$2.0 billion to \$2.5 billion a year on programming memory, microcontroller and logic devices and much of this programming is achieved through the use of the customers' test equipment offered by companies like Agilent and Teradyne or homegrown solutions for specific markets like automotive. The main competitive solution in the programmable market is, therefore, the in-house solution, and the opportunity exists to substitute customers' solutions with more economical and more easily maintainable solutions to solve the problems, which traditional programmers do not address. Boundary scan tools also fall into this category, although still a small market with a number of small companies participating who principally focus on test solutions. Our ImageWriter is a platform for application development for on board or in system programming.

#### Manufacturing, Raw Materials, and Backlog

Data I/O performs primarily assembly and testing of our products at our principal facility in Redmond, Washington and we outsource our circuit board manufacturing and fabrication. We use a combination of standard components, proprietary custom ICs and fabricated parts manufactured to Data I/O specifications. Two significant outside suppliers of Data I/O proprietary products are located in Germany. Haberer Electronic manufactures our Sprint non-automated programming systems and Yamaichi manufactures 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 ICs, hybrid circuits and connectors, are purchased from single sources. In late 2006, we began to transfer a portion of our FlashCORE adapter production to China and expect to continue this transfer during 2007. 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 \$2.1 million, \$2.2 million, and \$1.2 million as of December 31, 2007, 2006, and 2005, respectively. The size of backlog at any particular date is not necessarily a meaningful

indicator of the trend of our business.

#### **Research and Development**

Data I/O believes 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, additional platforms and improvements for ProLINE-RoadRunner, and enhancements for the FLX500. We continue to also focus on increasing our capacity and responsiveness for new device support requests from customers and programmable IC manufacturers by revising and enhancing our internal processes and tools. During this past year, our research and development resulted in our newest product: FLX-FMD.



During 2007, 2006, and 2005, we made expenditures for research and development of \$4,716,000, \$5,577,000, and \$5,286,000, respectively, representing 17.6%, 19.4%, and 18.7%, of net sales, respectively. Research and development costs are expensed as incurred.

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

Intellectual property rights applicable to various Data I/O products include patents, copyrights, trade secrets and trademarks. Data I/O also relies 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 have continued to add new patents to our patent portfolio over the past few years as we developed strategic technologies like the FLX500 that are critical to our Connected Strategy.

In November 2007 we signed an agreement and subsequently in March 2008 closed the sale of selected patents and patent applications to Leannoux Properties AG L.L.C. for net proceeds of approximately \$3.3 million and expect to report a net gain of approximately \$2.1 million, subject to customary closing conditions. The proposed patents and patent applications to be sold relate primarily to technology used in Data I/O Corporation's Proline RoadRunner product line. Data I/O will retain a non-exclusive, royalty-free license to use the technology covered by these patents and applications. Additional payments are due to Data I/O Corporation upon license or transfer of the proposed patents and patent applications to certain third parties. However Data I/O Corporation does not currently anticipate receiving any such payments.

Most of the patents to be sold relate to technology that the company has been practicing for a number of years. It monetizes the value of these patents, avoids future annual maintenance and patent defense expenses, and allows Data I/O royalty-free use of these patents. The sale does not include technology related to the firm's most recent development programs.

We attempt to protect our rights in proprietary software products, including TaskLink 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 normally sold separately from sales of programming systems. However, on those occasions where software is sold separately, revenue is recognized when a sales agreement exists, when delivery has occurred, when the fee is fixed or determinable, and when collectibility is probable.

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, therefore, 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, 2007, we had a total of 97 employees, of which 35 were located outside the U.S. and 5 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. 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. However, see Item 3, Legal Proceedings, regarding the Rowley Properties, Inc. claim.

#### **Executive Officers of the Registrant**

Set forth below is certain information concerning the executive officers of Data I/O as of March 20, 2008:

Name	Age	Position	
Frederick R. Hume	65	President and Chief Executive Officer	
Joel S. Hatlen	49	Vice President, Finance	
		Chief Financial Officer	
		Secretary and Treasurer	
Harald A. Weigelt	48	Vice President, Worldwide Sales	
		And Support	

Frederick R. Hume joined Data I/O as President and Chief Executive Officer in February 1999. He was appointed to the Board of Directors of Data I/O in January 1999. From 1988 until his retirement in 1998, Mr. Hume served as Vice President and General Manager of Keithley Instruments in Cleveland, Ohio. From 1972 to 1988, he held various management positions at Fluke Corporation, including Group Vice President for Manufacturing and Research and Development.

Joel S. Hatlen joined Data I/O in September 1991 and became Chief Accounting Officer and Corporate Controller in February 1997. In January 1998, he was promoted to Vice President of Finance and Chief Financial Officer, Secretary and Treasurer. He began his career at Data I/O as a Senior Tax Accountant and became Tax Manager in December 1992 and Corporate Controller in December 1993. From September 1981 until joining Data I/O, Mr. Hatlen was employed by Ernst & Young LLP, where his most recent position was Senior Manager.

Harald A. Weigelt joined Data I/O in 1991. In January 2006, he was appointed Vice President, Worldwide Sales and Service and in October, 2006, he was appointed Vice President, Worldwide Sales and Marketing. Prior to this position, he served as the Vice President, European Operations and as Managing Director of Data I/O's operations in Germany. Prior to joining Data I/O, he was employed with Instrumatic, where he served as Product Manager and was employed with Wavetek as Product Manager.

### Item 1A. Risk Factors

### **Cautionary Factors That May Affect Future Results**

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

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

### **RISK FACTORS**

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

Data I/O develops 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 handing systems
- inability to hire qualified personnel
- delays or failures to perform by third parties involved in our development projects
- development of new services that are not accepted by the market

Delays in the development, completion and shipment of new products or services, or failure of customers to accept new products, may result in a decline in sales.

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

Data I/O's 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
- 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
- the timing of significant orders
- the sales channel mix of direct vs. indirect distribution
- war or terrorism
- health issues (such as SARS)
- customers' budgets
- adverse movements in exchange rates, interest rates or tax rates
- cyclical 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 all 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 Data I/O's 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
- 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.

### A decline in economic and market conditions may result in decreased capital spending by our customers.

Our business is highly impacted by capital spending plans and other economic cycles that affect the users and manufacturers of ICs. 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, 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. These factors could have a material adverse effect on our business and financial condition.

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

We have incurred net losses in two of the last five years. We will continue to examine our level of operating expense based upon our projected revenues. Any planned increases in operating expenses may result in larger losses in future periods if projected revenues are not achieved. As a result, we may need to generate greater revenues than we have recently to achieve and maintain profitability. However, we cannot provide assurance that our revenues will increase and our strategy may not be successful, resulting in future losses.

#### Our restructuring activities may have a negative impact on our future operations.

Our restructuring plans may yield unanticipated consequences, such as increased burden on our administrative, operational, and financial resources and increased responsibilities for our management personnel. As a result, our ability to respond to unexpected challenges may be impaired and we may be unable to take advantage of new opportunities.

In addition, many of the employees that were terminated as a part of our restructuring possessed specific knowledge or expertise, and that knowledge or expertise may prove to have been important to our operations. In that case, their absence may create significant difficulties, particularly if our business experiences significant growth. Also, the reduction in workforce related to our restructuring may subject us to the risk of litigation, which could result in substantial cost. Any failure by us to properly manage this rapid change in workforce could impair our ability to efficiently manage our business, to maintain and develop important relationships with third-parties, and to attract and retain customers. It could also cause us to incur higher operating cost and delays in the execution of our business plan or in the reporting or tracking of our financial results.

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

Our past revenues have been and our future revenues may continue to 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. 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 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. 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.

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 or we experience deterioration in our relationship with these suppliers, 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 materially adversely affect our business. Over estimation of demand

will lead to excess inventories that may become obsolete.

The non-automated programming system products we acquired when we acquired SMS in November 1998 are currently manufactured to our specifications by a third-party foreign contract manufacturer. We may not be able to obtain a sufficient quantity of these products if and when needed, which may result in lost sales.

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

Data I/O has an internal sales force and also utilizes third-party representatives, and distributors. Therefore, the financial stability of these representatives and distributors is important. Highly skilled professional engineers use most of our products. To be effective, third-party distributors 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. Our business will suffer if we cannot attract and retain a sufficient number of qualified third-party distributors to market our products.

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

International sales represented 82% and 78% of our net revenue for the fiscal year ended December 31, 2007 and December 31, 2006, 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:

- 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
- 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 due to payment practices of certain foreign customers, the availability and reliability of foreign credit information, and potential difficulties in enforcing collection terms.

The European Community and European Free Trade Association ("EU") has established certain electronic emission and product safety requirements ("CE"). Although our products currently meet these requirements, failure to obtain either a CEcertification 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 Data I/O is relying on an exemption for test and measurement companies. China is implementing similar requirements. Failure to meet applicable directives or qualifying exemption may prevent us from marketing certain products in Europe or other territories with similar requirements.

We operate subsidiaries in Germany, China, Canada and Brazil. Our business and financial condition is sensitive to currency exchange rates or any other restrictions imposed on their currencies. Currency exchange fluctuations in Canada, China, Brazil and Germany 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.

Data I/O relies 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 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, therefore, 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 acquired entity
- diverting management's attention from other business concerns
- failing to successfully integrate the acquired products
- 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 Data I/O's 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. Refer to the section captioned <u>"Our restructuring activities may have a negative impact on our future operations</u>" above.

#### 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. 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 yet required to comply as we are not an accelerated filer. Data I/O assumes it will continue to have the status of a non-accelerated filer based on the aggregate market value of the voting and non-voting shares held as of June 30, 2007. During the course of our testing we may identify deficiencies which we may not be able to remediate in time to meet the deadline imposed by the Sarbanes-Oxley Act of 2002 for compliance with the requirements of Section 404. We may also incur additional costs in order to comply with Section 404. In addition, 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. 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.

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 Data I/O's 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 Data I/O's Common Stock.

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### Item 1B. Unresolved Staff Comments

None.

### Item 2. Properties

On February 28, 2006, Data I/O entered into a termination agreement for the Redmond headquarters facility lease and entered into a five year lease agreement for a 40,000 square foot office space also located in Redmond, Washington. The lease commenced and the move occurred during the third quarter of 2006. The lease base annual rental payments during 2007 were approximately \$520,000. The new lease requires base annual rental payments of approximately \$560,000 for 2008. See Note 9 of "Notes to Consolidated Financial Statements." We also entered into a new lease agreement during the second quarter of 2006 for our offices in Shanghai, China. During the fourth quarter of 2007, Data I/O terminated the leases for two China sales offices and moved to a new location for one, as a result of the restructure actions to lower costs.

In addition to the Redmond facility, approximately 14,000 square feet is leased at four foreign locations, including our German sales, service and engineering operations located in Munich, Germany, and two sales, service, and engineering offices located in China.

#### Item 3. Legal Proceedings

As of December 31, 2007, Data I/O was 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.

However, on January 22, 2008, our former landlord, (now known as Rowley Properties, Inc.), filed a Complaint in the Superior Court of Washington for King County (No. 08-2-03518-2 SEA) against Data I/O, Robert/Barbara Hiester and Steven/Jane Doe Hiester. The claims against Data I/O include breach of agreement, waste, and an environmental remediation claim for contribution under RCW 70.105D.080. No claim amount is specified in the Complaint. The claims relate to a former circuit board fabrication business that Data I/O operated from 1978 to October 1988. We sold that business to Circuit Partners whose officers and principal shareholders were Robert and Barbara Heister. As stated in Data I/O's 1988 10-K: "An environmental and regulatory compliance audit was performed prior to the sale, per the guidelines of the Comprehensive Environmental Response Compensation and Liability Ace ("Cercla/Superfund") Section 107. Audit results indicated no heavy metals or volatile organics in excess of existing or proposed Washington State or federal remedial action levels." We are in the very early stages of investigating and responding to this claim and have engaged counsel to represent us on this matter. We filed an Answer to the Complaint on March 12, 2008. At this time, we are not able to determine the probable outcome of this legal proceeding or if it will have an adverse effect on the results of operations or financial position of Data I/O. We intend to defend this claim vigorously and are in the process of determining the insurance coverage for this claim.

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. Submission of Matters to a Vote of Security Holders

No matters were submitted for a vote of shareholders of Data I/O during the fourth quarter of the fiscal year ended

December 31, 2007.

### 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 Data I/O's Common Stock as reported by the NASDAQ Capital Market (NASDAQ symbol is DAIO).

	Period	<u>High</u>	Low
2007	Fourth Quarter	\$6.74	\$3.97
	Third Quarter	3.71	3.12
	Second Quarter	4.41	3.22
	First Quarter	4.09	3.52
2006	Fourth Quarter	\$3.85	\$3.10
	Third Quarter	3.75	2.95
	Second Quarter	4.63	2.90
	First Quarter	5.20	3.85

The approximate number of shareholders of record as of March 20, 2008 was 648.

Except for a special cash dividend of \$4.15 per share paid on March 8, 1989, Data I/O has not paid cash dividends on our Common Stock and does not anticipate paying regular cash dividends in the foreseeable future.

No sales of unregistered securities were made by Data I/O during the periods ended December 31, 2007, December 31, 2006 and December 31, 2005.

See Item 12 for the Equity Compensation Plan Information.

#### SHARE REPURCHASE PROGRAM

Under a previously announced share repurchase program, Data I/O is authorized to repurchase up to 1,123,800 shares of our outstanding Common Stock. We may execute these purchases through open market purchases at prevailing market prices, through block purchases or in privately negotiated transactions, and we may commence or discontinue at any time. As of December 31, 2007, Data I/O has repurchased 1,016,200 shares under this repurchase program at a total cost of approximately \$7.1 million. Data I/O has not repurchased shares under this plan since the second quarter of 1997, although it still has the authority to do so.

**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 industry prospects and trends; future results of operations or financial position; 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; establishing 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 Data I/O believes 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. Data I/O is 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 continued to focus on our primary goal of managing the business to achieve profitable operations, while developing, launching and enhancing products to drive revenue and earnings growth. Our challenge continues to be operating in a cyclical and challenging industry environment. We saw a downturn in capital spending during the first six months of 2007, but saw a recovery in capital spending during the second half of 2007. We anticipate that demand for programming capacity may continue to improve in 2008, in part based on third party forecasted increased 2008 capacity for certain manufacturing segments, and market growth for the flash market, and the for certain target customer segments. Tempering this view is the current economic uncertainty regarding forecast business in certain geographic and customer segments.

Following our losses during the first two quarters of 2006, we launched an initiative during the third quarter of 2006 to lower the quarterly revenue breakeven point to below \$7 million, as it had increased to a calculated \$7.6 million for the second quarter of 2006. We again experienced losses during the first half of 2007 with declining revenues and gross margins and, as such, we decided to take additional expense reductions to lower our expected quarterly revenue breakeven point to below \$5.3 million when fully implemented during 2007. During the fourth quarter of 2007, we successfully completed these actions consisting of a combination of margin improvements and expense reductions. We have taken actions to improve the effectiveness of our sales and marketing organization. We have reduced expenses by reducing personnel costs, re-engineering some internal processes, and transferring some activities to our lower cost base of operations in China.

We are continuing our efforts to balance 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, and automated programming systems for the manufacturing environment, particularly the new FLX500 desktop automated programming system, and extending the capabilities and support for our FLX500, FlashCORE architecture, and the ProLINE-RoadRunner and PS families. We have

also introduced our new applications innovation strategy. This strategy provides complete solutions to target customer's business problems. These solutions will expand beyond what we have considered as products in the past. These solutions will have a larger software element, may involve third-party components, and in many cases, will be developed to address a specific customer's requirements. We believe by adding these features to our strategic product platforms, we will be able to set ourselves apart from other product suppliers and elevate our relationships with our customers to a partner level.

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 and microcontrollers on our newer products to gain new accounts and break into new areas, such as microcontrollers for the automotive market. We have expanded our China operations during 2006 to take advantage of the growth of manufacturing in China. We continue to address the effectiveness of our sales and marketing organization and sales channels. With the sales decline we experienced in the first half of 2007 in China, we recognized the need to diversify our customer base there and are taking steps to broaden our channels of distribution in China to reach a greater number of customers. This decision, made at the end of the first quarter of 2007, includes eliminating some China direct selling expenses and increasing the use of agents that have established relationships with the desired customers. We have also added additional Asian sales channel management to drive Asia sales and manage this important region. We believe this decision should help us more rapidly grow our business in China and convert some of

our fixed selling expenses to variable. During the first quarter of 2007, we repositioned and made changes that are expected to result in more effectively supporting our customer-centric application strategy for targeted segments. We continue our efforts to partner with the semiconductor manufacturers to better serve our mutual customers and members of the Preferred Partnership Program. The Preferred Partnership Program formalizes our mutual support relationship and is designed to increase collaboration between the semiconductor vendor and Data I/O to better serve our customers.

On March 18, 2008, the Company completed the sale of selected patents and patent applications to Leannoux Properties AG L.L.C. Net proceeds were approximately \$3.3 million, with a net gain of approximately \$2.1 million.

#### **BUSINESS RESTRUCTURING PROGRESS**

During the second half of 2006, as part of our additional effort to reduce expenses, we incurred restructuring charges of approximately \$152,000 in the third quarter and \$39,000 in the fourth quarter of 2006. The restructuring charges are primarily related to severance charges incurred at our Redmond, Germany and China offices. In view of our declining margins and operating results during the first and second quarters of 2006, actions were taken to reduce expenses and improve margins.

We continued our restructuring activities during the first and second quarters of 2007, to further improve our operating results and the effectiveness of our sales and marketing organization and sales channels. During the first quarter of 2007, we recorded restructuring charges of approximately \$200,000 primarily related to severance charges. During the second quarter of 2007, we recorded an additional \$632,000 of restructuring charges. These actions included re-engineering some internal processes, integrating some activities, transferring some activities to our lower cost base of operations in China, reducing resources applied to declining legacy products, moving some engineering positions to production, reducing the number of taxable entities, outsourcing some functions such as payroll, combining some positions, eliminating some functions, and shifting some responsibilities and resources to our channels. During the third quarter of 2007, we recorded a net expense reversal of \$107,000 comprised of \$54,000 of additional expense, primarily relating to facilities, and a reversal of \$161,000 of previously accrued severance primarily because certain employees who had been scheduled for termination had their termination notice rescinded. At December 31, 2007, \$8,000 remains accrued and is expected to be paid out during the first quarter of 2008.

#### 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, Data I/O evaluates our estimates, including those related to sales returns, bad debts, inventories, investments, 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.

Data I/O believes the following critical accounting policies affect the more significant judgments and estimates used in the preparation of our financial statements:

Revenue Recognition: Sales of Data I/O's semiconductor programming equipment requiring installation by us that is other than perfunctory were previously recorded when installation was complete, or at the later of customer acceptance or installation, if an acceptance clause is specified in the sales terms. Beginning in the third quarter of 2005, Data I/O began recognizing revenue for these products at the time of shipment. We began recognizing revenue at the time of shipment after we 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 customer and the history provided by our installed base of products upon which the current versions were based. When arrangements include multiple elements, we use objective evidence of fair value to allocate revenue to the elements pursuant to EITF 00-21, "Revenue Arrangements with Multiple Deliverables," and recognize revenue when the criteria for revenue recognition have been met for each element according to SAB 104, "Revenue Recognition." The amount of revenue recognized is affected by our judgments as to the collectibility of the transaction or whether an arrangement includes multiple elements and if so, whether specific objective evidence of fair value exists for those elements. The measure of standalone fair value of the product versus the service installation value component is determined by the amount Data I/O pays to independent representative service groups or the amount of additional discount given to independent distributors, to provide the service installation. Changes to the elements in an arrangement and the ability to establish specific objective evidence for those elements could affect the timing of the revenue recognition. These conditions could be subjective and actual results could vary from the estimated outcome.

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 collectibility 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. Data I/O has 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 in writing by Data I/O. In accordance with SFAS 48, "Revenue Recognition When Right of Return Exists," provisions for revenue recognition, 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. We do not have significant obligations for future performance to directly bring about the resale of the product by the buyer. The change in the sales allowance for returns from 2004 to 2006 relate to the history and experience of decreasing actual returns, despite increased sales, which is attributed to the business shifting to more automated products for which returns are rare, as well as quality initiatives that raised our initial delivery quality and our products maturing and gaining acceptance and a larger installed base in the market.

Allowance for Doubtful Accounts: We base the allowance for doubtful accounts receivable on our assessment of the collectibility 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 ("locom") with cost being currently adjusted at standard cost which approximates 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 locom adjustment 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, Data I/O may be required to increase our inventory adjustments and our gross margin could be adversely affected.

Warranty Accruals: Data I/O accrues 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, Data I/O expects to continue to limit the recognition of net deferred tax assets and accounting for uncertain tax positions and maintain the tax valuation allowances. We expect, therefore, that reversals of the tax valuation allowance will take place for the next few years 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 accounted for share-based awards made to our employees and directors including employee stock option awards, employee stock purchases made under our Employee Stock Purchase Plan ("ESPP) and restricted and performance share awards using the estimated grant date fair value method of accounting in accordance with SFAS, No. 123 (revised 2004), "Share-Based Payment (SFAS No. 123(R)," which was effective January 1, 2006 for Data I/O. 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 a combination of historical and implied volatility of the Company's 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. Beginning in the second quarter of 2006, restricted stock awards and performance-based stock awards were granted. The vesting of the performance-based stock awards is based on attaining a particular revenue growth target during the three year period ending December 31, 2008. However, during the third quarter of 2007, we reversed the compensation expense related to the performance-based stock awards, based upon the likelihood of not meeting the performance goal for the year ending December 31, 2008. Beginning August 2006, ESPP shares were issued under provisions that do not require expense under SFAS 123(R).

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### Results of Operations

### NET SALES

(in thousands) Net sales by product line:	2007	Change	2006
Automated programming systems Non-automated programming systems	\$16,710 10,042	(5.6%) (9.4%)	\$17,709 11,084
Totals	\$26,752	_	