DATA I/O CORP

Form S-3

December 23, 2004

As filed with the Securities and Exchange Commission on December 22, 2004 SEC File No. 333-

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

FORM S-3

REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933
DATA I/O CORPORATION

(Exact Name of Registrant as Specified in its Charter)

Washington

(State or other jurisdiction of incorporation or organization)

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

10525 Willows Road N.E. Redmond, Washington 98052 (425) 881-6444

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

Joel S. Hatlen

Vice President, Chief Financial Officer, Secretary and Treasurer \$10525\$ Willows Road N.E. Redmond, Washington 98052

(425) 881-6444

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

Kimberley R. Anderson, Esq.
Dorsey & Whitney LLP
1420 Fifth Avenue, Suite 3400
Seattle, WA 98101-4010
Telephone: (206) 903-8800

Facsimile: (206) 903-8820

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are to be offered pursuant to dividend or interest reinvestment plans, please check the following box. $|_|$

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. |X|

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, as amended, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. $|_|$

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act of 1933, as amended, check the following box and list the

Securities Act registration statement number of the earlier effective registration statement for the same offering. $| _ |$ If delivery of the prospectus is expected to be made pursuant to Rule 434, check the following box. $| _ |$

CALCULATION OF REGISTRATION FEE

Title of Shares to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price per share(2)	Proposed Maximum Aggregate Offering Price(2
Common Stock Without Par Value	1,100,000	\$3.37	\$3,707,000

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended, this Registration Statement also covers such additional number of shares of common stock as may become issuable under any stock split, stock divided or similar transactions.
- (2) Estimated based upon the average of the high and low sales prices of the Registrant's common stock on December 21, 2004, as reported by the Nasdaq SmallCap Market, pursuant to Rule 457(c) promulgated under the Securities Act of 1933, as amended.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The selling shareholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to completion: Dated December 22, 2004

DATA I/O CORPORATION

1,100,000 Shares of Common Stock

This prospectus relates to the sale, transfer or distribution of up to 1,100,000 shares of the common stock, without par value per share, of Data I/O Corporation by the selling shareholders described herein. The price at which the selling shareholders may sell the shares will be determined by the prevailing market

price for the shares or in negotiated transactions.

We will not receive any proceeds from the sale or distribution of the common stock by the selling shareholders. We could receive up to \$664,032 in gross proceeds from the cash exercise of certain options by the selling shareholders, which proceeds would be used for general corporate purposes.

Our common stock is quoted on the Nasdaq SmallCap Market under the trading symbol "DAIO." On December 21, 2004, the last price for our common stock, as reported by the Nasdaq SmallCap Market, was \$3.39 per share.

See "Risk Factors" beginning at page two to read about certain factors you should consider before buying shares of our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is ______, 2004.

TABLE OF CONTENTS

Section	Page
Data I/O Corporation	5
Risk Factors	6
Special Note About Forward-Looking Information	11
Use of Proceeds	11
Selling Shareholders	11
Plan of Distribution	12
Validity of Common Stock	12
Experts	12
Where You Can Find More Information	12

DATA I/O CORPORATION

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 a global leader in this market. Data I/O incorporated in the state of Washington in 1969.

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, getting their products to market faster, while reducing 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. Data I/O's connected strategy leverages network capable products to move the customer's intellectual property seamlessly and securely up and down the supply chain. Our connected strategy allows customers to connect engineering to manufacturing to end customers.

Some of our customers are delaying shipments which were anticipated for the fourth quarter of 2004 until the first quarter of 2005 and in some cases, they are pushing out orders as well. We believe that these delays are not related to the overall demand for our products, but reflect the seasonality of our customers' business.

Our principal executive offices are located at 10525 Willows Road NE, Redmond, Washington 98052. Our telephone number at that location is (425) 881-6444. Unless the context otherwise requires, when used herein, the terms "we," "us," "our," "Data I/O," or the "Company" refers to Data I/O Corporation and its subsidiaries.

RISK FACTORS

Our business is subject to a number of risks, some of which are discussed below. Other risks are presented elsewhere in this prospectus and in the information incorporated by reference into this prospectus. Before deciding to invest in our company or to maintain or increase your investment, you should carefully consider the risks described below, in addition to the other information contained in this prospectus, our Annual Report on Form 10-K for the fiscal year ended December 31, 2003, our Quarterly Reports on 10-Q for the fiscal quarters ended March 31, 2004, June 30, 2004 and September 30, 2004; and in our other filings with the Securities and Exchange Commission (the "SEC"), including any subsequent reports filed on Forms 10-K, 10-Q and 8-K. The risks and uncertainties described below are not the only ones that we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business and results of operations. If any of these risks actually occurs, our business, financial condition or results of operations could be seriously harmed. In that event, the market price for our

common stock could decline and you may lose all or part of your investment.

DELAYS IN DEVELOPMENT, INTRODUCTION AND SHIPMENT OF NEW PRODUCTS MAY RESULT IN A DECLINE IN SALES.

Data I/O currently is developing new engineering and automated programming systems. Significant technological, supplier, manufacturing or other problems may delay the development, introduction or production of these products.

For example, we may encounter these problems:

- o technical problems in the development of a new programming system platform or the robotics for new automated handing systems
- o inability to hire qualified personnel
- o delays or failures to perform by third parties involved in our development projects

Delays in the development, completion and shipment of new products, 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:

- o increased competition
- o timing of new product announcements
- o product releases and pricing changes by us or our competitors
- o market acceptance or delays in the introduction of new products
- o production constraints
- o labor or material shortages
- o the timing of significant orders
- o the sales channel mix of direct vs. indirect distribution
- o war or terrorism
- o health issues (such as Severe Acute Respiratory Syndrome ("SARS"))
- o customers' budgets
- o adverse movements in exchange rates, interest rates or tax rates
- o cyclical nature of demand for our customers' products

o general economic conditions in the countries where we sell products

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 NEGATIVELY IMPACT OUR COMPETITIVENESS AND FINANCIAL RESULTS.

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

- o new device package types, densities, and technologies requiring hardware and software changes in order to be programmed by our products
- o electronics equipment manufacturing practices, such as widespread use of custom in-circuit programming ("ISP") solutions
- o customer software platform preferences different from those on which our products operate
- o more rigid industry standards, which would decrease the value-added element of our products and support services

If we cannot develop products in a timely manner in response to industry changes, or if our products do not perform well, our business and financial condition will be adversely affected. Also, our new products 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, fluctuations in manufacturing capacity and pricing and gross margin pressures. 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 our last three fiscal 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 RECENT 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 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. 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 costs 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 Data I/O's common stock ("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 markets. 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 RELATIONSHIPS WITH SEMICONDUCTOR MANUFACTURERS DETERIORATE, 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 line 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 manufactures deteriorate.

OUR RELIANCE ON A SMALL NUMBER OF SUPPLIERS COULD 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 under estimate 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.

IF WE ARE UNABLE TO ATTRACT AND RETAIN QUALIFIED THIRD-PARTY DISTRIBUTORS, OUR OPERATIONS 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 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 70% of our net revenue for the fiscal year ended December 31, 2003 and 80% for the first nine months of 2004. We expect that international sales will continue to be a significant portion of our net revenue. International sales and operations may fluctuate due to various factors, including:

- o migration of manufacturing to low cost geographies
- o unexpected changes in regulatory requirements
- o tariffs and taxes
- o difficulties in staffing and managing foreign operations
- o longer average payment cycles and difficulty in collecting accounts receivable
- o fluctuations in foreign currency exchange rates $% \left(1\right) =\left(1\right) \left(1\right) \left($
- o impact of the Euro

- o compliance with applicable export licensing requirements
- o product safety and other certification requirements
- o difficulties in integrating foreign and outsourced operations
- o political and economic instability

The European Community and European Free Trade Association have established certain electronic emission and product safety requirements ("CE"). Although our products currently meet these requirements, failure to obtain either a CE certification or a waiver for any product may prevent us from marketing that product in Europe.

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, Germany and Brazil may adversely affect our investment in our subsidiaries.

IF WE ARE UNABLE TO PROTECT OUR INTELLECTUAL PROPERTY OR INFRINGE ON OTHER 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 MAY IMPAIR OUR FINANCIAL POSITION AND PROFITABILITY.

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

- o burdening management and our operating teams during the integration of the acquired entity $\ensuremath{\mathsf{C}}$
- o diverting management's attention from other business concerns
- o failing to successfully integrate the acquired products
- o lack of acceptance of the acquired products by our sales channels or customers
- o entering markets where we have no or limited prior experience
- o potential loss of key employees of the acquired company

o 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.

As of November 30, 2004, we had 129 employees, of which 38 were located outside the U.S. 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.

FAILURE TO COMPLY WITH REGULATORY REQUIREMENTS MAY ADVERSELY AFFECT OUR STOCK PRICE AND BUSINESS.

We are subject to numerous governmental and stock exchange requirements as a public company, which we believe we are in compliance with. The Sarbanes-Oxley Act of 2002, the Securities and Exchange Commission (SEC) and the Public Company Oversight Accounting Board (PCOAB) have requirements that we may fail to meet by required deadlines or we may fall out of compliance with, such as the internal controls assessment, reporting and auditor attestation required under Section 404 of the Sarbanes-Oxley Act of 2002 for which we are relying on not being an accelerated filer. We are in the process of documenting and testing our internal control procedures in order to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act of 2002, which requires annual management assessments of the effectiveness of our internal controls over financial reporting and a report by our Independent Auditors addressing these assessments. 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. 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 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 result in securities claims and litigation.

Our stock $\mbox{price may}$ be volatile $\mbox{and,}$ as a result, $\mbox{you may}$ 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 by us or our competitors, quarterly variations in financial results and sales of our common stock 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.

SPECIAL NOTE ABOUT FORWARD-LOOKING INFORMATION

This prospectus and the documents incorporated by reference in this prospectus contain forward-looking statements. These forward-looking statements are based on our current expectations, estimates and projections about our industry, management's beliefs and certain assumptions made by us. Words such as "anticipate," "expect," "intend," "plan," "believe," "seek," "estimate," "predict," "continue," "will" and "may" and variations of these words or similar expressions are intended to identify forward-looking statements. statements reflect the views of our management at the time they are made based on information currently available to management. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict. Therefore, our actual results could differ materially from those expressed or forecasted in any forward-looking statements as a result of a variety of factors, including those set forth in "Risk Factors" above and elsewhere in, or incorporated by reference into, this prospectus. Except as required by law, we undertake no obligation to update publicly any forward-looking statements for any reason, even if new information becomes available or other events occur in the future.

USE OF PROCEEDS

The shares of Common Stock offered by this prospectus will be sold or distributed by the selling shareholders, and the selling shareholders will receive all of the proceeds, if any, from the sales of such shares by them. We will not receive any proceeds from the sale or distribution of the Common Stock by the selling shareholders. We could receive up to \$664,032 in gross proceeds from the cash exercise of certain options by the selling shareholders, which proceeds would be used for general corporate purposes.

SELLING SHAREHOLDERS

This prospectus covers the offering of shares of Common Stock by the selling shareholders named below. This prospectus is part of a registration statement filed in order to register, on behalf of the selling shareholders, an aggregate total of 1,100,000 shares of Common Stock. The following are the number of shares beneficially owned by the selling shareholders prior to this offering; the number of shares to be offered for the selling shareholders' accounts; and the number of shares to be owned by the selling shareholders following completion of the offering:

Name	Number of Shares Owned Before Offering	Number of Shares Offered	Number of Shares Owned Upon Completion of Offering
Fredrick R. Hume	342,832(1)	100,000	242,832(2)
Bisco Industries, Inc.	723,263(4)	690,000	33,263(2)
Bisco Industries, Inc. Profit Sharing and Savings Plan	334,564(4)	310,000	24,564(2)

- (1) Includes options to purchase 312,500 shares exercisable within 60 days.
- (2) This figure assumes that the selling shareholders will sell all of their shares available for sale during the effectiveness of the registration statement that includes this prospectus. The selling shareholders are not required to sell their shares. See "Plan of Distribution."
- (3) Based on 8,056,049 shares of Common Stock outstanding as of November 1, 2004 as reported by the Company in its quarterly report on Form 10-Q filed with the SEC on November 15, 2004.
- (4) The holding shown is as of December 15, 2004, as reported to Data I/O by Glen F. Ceiley on behalf of Bisco Industries, Inc. ("Bisco") on Form 4 and Bisco Industries, Inc. Profit Sharing and Savings Plan (the "Bisco Plan") on Schedule 13D. Mr. Glen Ceiley is the President, a director, and the sole shareholder of Bisco and is also the sole trustee of the Bisco Plan.

Mr. Glen Ceiley has been a director of Data I/O since February 1999. Since 1973, Mr. Ceiley has been the President and Chief Executive Officer of Bisco Industries, a distributor of fasteners and electronic components, which, as part of a group, currently owns approximately 13.18% of the Company's outstanding Common Stock.

Frederick R. Hume became President and Chief Executive Officer of Data I/O on February 23, 1999. He has been a director of Data I/O since January 1999.

PLAN OF DISTRIBUTION

We are registering the shares on behalf of the selling shareholders. When we refer to selling shareholders, we intend to include donees and pledgees selling shares received from a named selling shareholder after the date of this prospectus. All costs, expenses and fees in connection with the registration of the shares offered under this Registration Statement will be borne by us. Brokerage commissions and similar selling expenses, if any, attributable to the sale of shares will be borne by the selling shareholders. Sales of shares may be effected by the selling shareholders from time to time in one or more types of transactions (which may include block transactions) on the Nasdaq National Market, the Nasdaq SmallCap Market, in the over-the-counter market, in negotiated transactions, through put or call options transactions relating to the shares, through short sales of shares, or a combination of such methods of sale, at market prices prevailing at the time of sale, or at negotiated prices. Such transactions may or may not involve brokers or dealers. The selling shareholders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their securities, nor is there an underwriter or coordinating broker acting in connection with the proposed sale of shares by the selling shareholders.

The selling shareholders may effect such transactions by selling shares directly to purchasers or to or through broker-dealers, which may act as agents or principals. Such broker-dealers may receive compensation in the form of discounts, concessions, or commissions from the selling shareholders and/or purchasers of shares for whom such broker-dealers may act as agents or to whom they sell as principal, or both (which compensation as to a particular broker-dealer might be in excess of customary commissions).

The selling shareholders and any broker-dealers that act in connection with the sale of shares might be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act of 1933, as amended (the "Securities Act"), and any commissions received by such broker-dealers and any profit on the resale of shares sold by them while acting as principals might be deemed to be underwriting discounts or commissions under the Securities Act. The selling shareholders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the shares against some liabilities arising under the Securities Act.

Because the selling shareholders may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act, the selling shareholders will be subject to the prospectus delivery requirements of the Securities Act. We have informed the selling shareholders that the anti-manipulative provisions of Regulation M promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act") may apply to their sales in the market.

Selling shareholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, provided they meet the criteria and conform to the requirements of such Rule. Upon being notified by any selling shareholder that any material arrangement has been entered into with a broker-dealer for the sale of shares through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, we will file a supplement to this prospectus, if required, under Rule 424(b) of the Act, disclosing:

- o the name of each selling shareholder(s) and of the participating broker-dealer(s);
- o the number of shares involved;
- o the price at which the shares were sold;
- o the commissions paid or discounts or concessions allowed to the broker-dealer(s), where applicable;
- o that the broker-dealer(s) did not conduct any investigation to verify information set out or incorporated by reference in this prospectus; and
- o other facts material to the transaction.

In addition, upon being notified by any selling shareholder that a donee or pledgee intends to sell more than $500~\rm shares$, we will file a supplement to this prospectus.

LEGALITY OF SECURITIES

Dorsey & Whitney LLP, Seattle, Washington, has provided an opinion that the shares of Common Stock offered by this prospectus are legally issued, fully paid and nonassessable.

EXPERTS

The consolidated financial statements and schedule of Data I/O Corporation as of December 31, 2003 and 2002 and for each of the years in the three-year period ended December 31, 2003 have been incorporated by reference herein and in the registration statement in reliance upon the report of Grant Thornton LLP, an independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 with the SEC to register the sale of the shares of Common Stock offered by the selling shareholders under the Securities Act. This prospectus, which is a part of the registration statement, does not contain all of the information that is in the registration statement.

Statements made in this prospectus as to the content of any contract, agreement or other document are not necessarily complete. Some contracts, agreements, or other documents are filed as exhibits to the registration statement or to a document incorporated by reference in this prospectus. In those cases, investors should refer to such exhibits for more complete descriptions.

We file annual, quarterly and special reports, proxy and information statements and other information with the SEC. The public may read and copy, at prescribed rates, any materials we file with the SEC, including the registration statement and its exhibits and any documents incorporated by reference into this prospectus, at the SEC's offices at: Public Reference Room, 450 Fifth Street, N.W., Washington, D.C. 20549. For information on how to obtain such documents from the SEC, investors may telephone the SEC's Public Reference Room at 1-800-SEC-0330. The SEC Internet site at http://www.sec.gov contains materials that we file with the SEC in electronic version through the SEC's Electronic Data Gathering, Analysis and Retrieval (EDGAR) system.

We are allowed by the SEC to "incorporate by reference" information filed with the SEC, which means that we can disclose important information to people by referring them to other documents that we file with the SEC. The information incorporated by reference is considered to be part of this prospectus. We have filed the following documents with the SEC pursuant to the Exchange Act and are incorporating them by reference into this prospectus:

- (a) the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2003;
- (b) the Company's Quarterly Reports on Form 10-Q for the quarters ended March 31, 2004, June 30, 2004 and September 30, 2004;
- (c) the Company's Current Report on Form 8-K filed on February 18, 2004, April 26, 2004, August 5, 2004 and October 25, 2004; and
- (c) the description of the Company's Common Stock, no par value per share, as contained in Item 1 of the Registration Statement on Form 8-A filed on April 29, 1982 including any amendment or report filed for the purpose of updating such description filed for the purpose of updating such description.

We also incorporate all documents we subsequently file with the SEC pursuant to Section 13(a), 13(c), 14, or 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of this offering. The information in these documents will update and supersede the information in this prospectus.

We will provide at no cost to each person to whom this prospectus is delivered, including any beneficial owner, upon written or oral request, a copy of any or all of the information that has been incorporated by reference in this prospectus but not delivered with this prospectus. Investors should direct requests to Joel S. Halten, Data I/O Corporation, 10525 Willows Road NE, P.O. Box 97046, Redmond, Washington 98073-9746, telephone: (425) 881-6444.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following are the estimated expenses in connection with the distribution of the securities being registered:

Securities and Exchange Commission registration	fee	\$ 436
Legal fees		\$10,000
Accounting fees and expenses		\$ 7,500
Total		\$17 , 936

All expenses, except the SEC fees, are estimates.

The selling shareholders will not bear any portion of the foregoing expenses, but will pay fees in connection with the sale of the Common Stock in those transactions completed to or through securities brokers and/or dealers in the form of markups, markdowns, or commissions.

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Company's articles of incorporation and bylaws limit the liability of the Company's directors to the fullest extent permitted by the Washington business corporation act (the "WBCA") as it currently exists or as it may be amended in the future. Consequently, subject to the WBCA, no director will be personally liable to the Company or its shareholders for monetary damages resulting from his or her conduct as a director, except liability for:

- o acts or omissions involving intentional misconduct or knowing violations of law;
- o unlawful distributions; or
- o transactions from which the director personally receives a benefit in money, property or services to which the director is not legally entitled.

The Company's articles of incorporation also provide that the Company may indemnify any individual made a party to a proceeding because that individual is or was a director or officer of the Company, and this right to indemnification will continue as to an individual who has ceased to be a director or officer and will inure to the benefit of his or her heirs, executors or administrators. Any subsequent repeal of or modification to the Company's articles of incorporation will not adversely affect any right of a director or officer of ours who is or was a director or officer at the time of such repeal or modification. To the extent the provisions of the Company's articles of incorporation provide for indemnification of directors or officers for liabilities arising under the Securities Act, those provisions are, in the opinion of the SEC, against public policy as expressed in the Securities Act and therefore unenforceable.

The Company's articles of incorporation and bylaws provide that the Company will indemnify its directors and officers and may indemnify its other employees and agents to the fullest extent permitted by law. The Company's directors, officers and employees also may be indemnified against liability they may incur for serving in that capacity pursuant to a liability insurance policy maintained by the Company for such purpose.

ITEM 16. EXHIBITS

The following documents are included as exhibits to this Registration Statement, pursuant to Item 601 of regulation S-K.

Exhibit No. Title of Document

- 5.1 Opinion of Dorsey & Whitney LLP.
- 23.1 Consent of Grant Thornton LLP, an independent registered public accounting firm.

- 23.2 Consent of Dorsey & Whitney LLP (contained in Exhibit 5.1).
- 24.1 Power of Attorney (included in signature page).

ITEM 17. UNDERTAKINGS

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by section 10(a)(3) of the Securities Act;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the registration statement is on Form S-3, Form S-8 or Form F-3, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the SEC by the registrant pursuant to section 13 or section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities

at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the question has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Redmond, Washington, on December 22, 2004.

DATA I/O CORPORATION

By:/s/Joel S. Hatlen Vice President, Chief Financial Officer, Secretary and Treasurer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Fredrick R. Hume and Joel S. Hatlen, jointly and severally, as attorneys-in-fact, each with the power of substitution, for him in any and all capacities, to sign any amendment to this Registration Statement and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting to said attorneys-in-fact, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person hereby ratifying and confirming all that said attorneys-in-fact or any of them, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature Title Date

/s/ Frederick R. Hume Chief Executive Officer, December 22, 2004
President and a director
(Principal Executive Officer)

/s/ Joel S. Hatlen	Vice President of Finance, Chief Financial Officer, Secretary and Treasurer	December 22,	2004
	(Principal Financial Officer and Ac	ccounting Office	er)
/s/ Glen F. Ceiley	Director	December 22,	2004
/s/ Daniel A. DiLeo	Director	December 22,	2004
/s/ Paul A. Gary	Director	December 22,	2004
/s/ Edward D. Lazowska	Director	December 22,	2004
/s/ Steven M. Quist	Director	December 22,	2004
/s/ William R. Walker	Director	December 22,	2004

EXHIBIT INDEX

Exhibit No.	Title of Document
5.1	Opinion of Dorsey & Whitney LLP.
23.1	Consent of Grant Thornton LLP, an independent registered public accounting firm.
23.2	Consent of Dorsey & Whitney LLP (contained in Exhibit 5.1).
24.1	Power of Attorney (included in signature page).

Exhibit 5.1

Dorsey & Whitney LLP
U.S. Bank Building Center, Suite 400
1420 Fifth Avenue
Seattle, WA 98101

December 22, 2004

Data I/O Corporation 10525 Willows Road N.E. Redmond, WA 98052

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted acted as counsel to Data I/O Corporation, a Washington corporation (the "Company"), in connection with a Registration Statement on Form S-3 (the "Registration Statement") relating to the resale of up to 1,100,000 shares of

the Company's common stock, without par value per share, by certain shareholders of the Company named in the Registration Statement, of which (i) 787,000 shares (the "Shares") are currently outstanding and (ii) 312,500 shares (the "Option Shares") are issuable by the Company upon exercise pursuant to the Company's 2000 Stock Compensation Incentive Plan, as amended, and the Company's 1986 Stock Option Plan, as amended (together, the "Plan").

We have examined such documents and have reviewed such questions of law as we have considered necessary and appropriate for the purposes of the purposes of the opinions set forth below.

In rendering our opinions set forth below, we have assumed the authenticity of all documents submitted to us as originals, the genuineness of all signatures and the conformity to authentic originals of all documents submitted to us as copies. We have also assumed the legal capacity for all purposes relevant hereto of all natural persons and, with respect to all parties to agreements or instruments relevant hereto other than the Company, that such parties had the requisite power and authority (corporate or otherwise) to execute, deliver and perform such agreements or instruments, that such agreements or instruments have been duly authorized by all requisite action (corporate or otherwise), executed and delivered by such parties and that such agreements or instruments are the valid, binding and enforceable obligations of such parties. As to questions of fact material to our opinions, we have relied upon certificates of officers of the Company and of public officials.

Based on the foregoing, we are of the opinion that (i) the Shares are validly issued, fully paid and nonassessable, and (ii) the Option Shares, upon issuance, delivery and payment therefore in accordance with the Plans will be validly issued, fully paid and nonassessable.

Our opinions expressed above are limited to the laws of the state of Washington.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement, and to the reference to our firm in the prospectus constituting part of the Registration Statement.

Very truly yours,

/s/ Dorsey & Whitney LLP

KRA/

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated February 6, 2004 accompanying the financial statements of Data I/O Corporation appearing in the Annual Report on Form 10K of the Company for the year ended December 31, 2003, which is incorporated by reference in this Registration Statement. We consent to the incorporation by reference in this Registration Statement of the aforementioned report and to the use of our name as it appears under the caption "Experts."

/s/ GRANT THORNTON LLP

Seattle, Washington December 22, 2004